

Ethnozoological Survey of the Orang Asli of Terengganu, Peninsular Malaysia



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Abstract The forest-dependent, indigenous people of Peninsular Malaysia are known as the Orang Asli. Few studies on animal resource utilisation among the Orang Asli have been done, and this study aims to characterise the animals utilised by them. A survey was conducted in Kampung Sungai Berua, Kenyir, during a seven-month period using the qualitative approach. This study found that the Orang Asli depend significantly on animals for their well-being and sustaining their livelihood. A total of 32 species of wildlife, comprising 13 mammals, 10 reptiles and nine birds, were recorded. Data obtained from the survey provide a clearer view of the use of wildlife among the Orang Asli in terms of household consumption, medicinal purposes, trading and companionship. This study provides the information to generate knowledge on animal utilisation by the Orang Asli in Kenyir, Hulu Terengganu, Terengganu.

Keywords Orang Asli · Livelihood · Ethnozoology · Animal utilisation

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Introduction

Ethnozoology refers to the study of the relationship between humans and animals in their environment. It highly reflects the importance of animals in the life of man (Alves 2012). Historically, various animals have been utilised for many purposes, and have provided significant support to humans in terms of livelihood. For instance, wild-life products that are readily available, such as ivory, bones, antlers and feathers, have been used by humans as tools and ornaments since prehistoric times (Pederson 2004).

In Peninsular Malaysia, the forest-dependent community belongs to one of the minority groups, which are the indigenous people. The indigenous people (or Orang Asli in Malay) are the earliest inhabitants of Peninsular Malaysia. Some of the sub-tribes have lived in Peninsular Malaysia for at least 25,000 years (Nicholas 2000), and they have been called the “first people” or “original people”. The three major groups of the Orang Asli are the Senoi, Negrito and Proto Malay, and they are made up of 18 sub-ethnic groups (Carey 1976). Each sub-tribe has a distinctive culture, belief, language, tradition and lifestyle. The Negrito consists of the Kintak, Kensiu, Jahai, Medrik, Batek and Lanoh, while the Senoi consists of the Semai, Temiar, Jah Hut, Mah Beri, Che wong and Semoq Beri. The Temuan, Jakun, Semelai, Orang Seletar, Orang Kuala and Orang Kanaq, meanwhile, are Proto Malays.

Today, many Orang Asli communities have been resettled in villages outside of forests. Traditionally, the Orang Asli lived in and around forests in bamboo and rattan huts. They live a nomadic and semi-nomadic life, acquiring various resources in and around their surrounding forests to survive (Kuchikura 1986). Their high dependency on forest resources and products has been widely studied (Ramle et al. 2014), particularly among the Batek communities (Tuck-Po 1998). It appears that poverty is one likely reason for this high dependency. According to a report from the Statistics Department (2010), 1.4% of indigenous people nationwide were classified as poor. In Pahang, 35.2% of the Orang Asli were classified as hardcore poor.

Only a few studies have documented the use of animals by the Orang Asli in Peninsular Malaysia. At least 12 species are known to be utilised by the Orang Asli for various purposes (Yahaya 2015; Azliza et al. 2012, Howell et al. 2010). In Sarawak, however, up to 52 species of animals have been utilised by the indigenous people for medicinal purposes (Mohd Azlan and Muhammad Faisal 2006). Thus, this survey aims to compile a list of wildlife utilised by the Orang Asli community living near Tasik Kenyir (the largest man-made lake in southeast Asia) in Terengganu. The uses of the wildlife will also be discussed.

Methods

Background of Study Area

The survey was conducted at Kampung Sungai Berua (5° 4' 49.8" N 102° 53' 2.76" E), an Orang Asli village in Kenyir, Hulu Terengganu, Terengganu (Fig. 1). The majority of the Orang Asli in the village were from the Semoq Beri sub-tribe of the Senoi. The

estimated population of the village was 533 people, comprising 104 families (JAKOA 2015). Kampung Sungai Berua had undergone major developments resulting from the construction of two new roads. One of the roads connected Kampung Tapah to Tasik Kenyir via Kampung Sungai Berua, while the other was from Kuala Berang to Gua Musang in the neighbouring state of Kelantan. The Orang Asli village is located just by the side of the road from Kampung Tapah to Tasik Kenyir, making the village easily accessible. Therefore, there was frequent interaction between the villagers and outsiders, such as government officials, middlemen and local traders.

Data Collection

Data was collected during a seven-month period (August 2015 to February 2016). An official approval for the study was obtained from the Orang Asli Development Department (JAKOA). Next, permission was obtained from the village head, or Tok Batin, to interview the villagers. Primary and secondary data were both collected. The secondary data were obtained from various resources, including books, journals and documented reports. The collection of primary data involved field surveys, in-depth interviews and participatory observations. Face-to-face interviews were conducted with hunters and traditional medicine practitioners in the village on

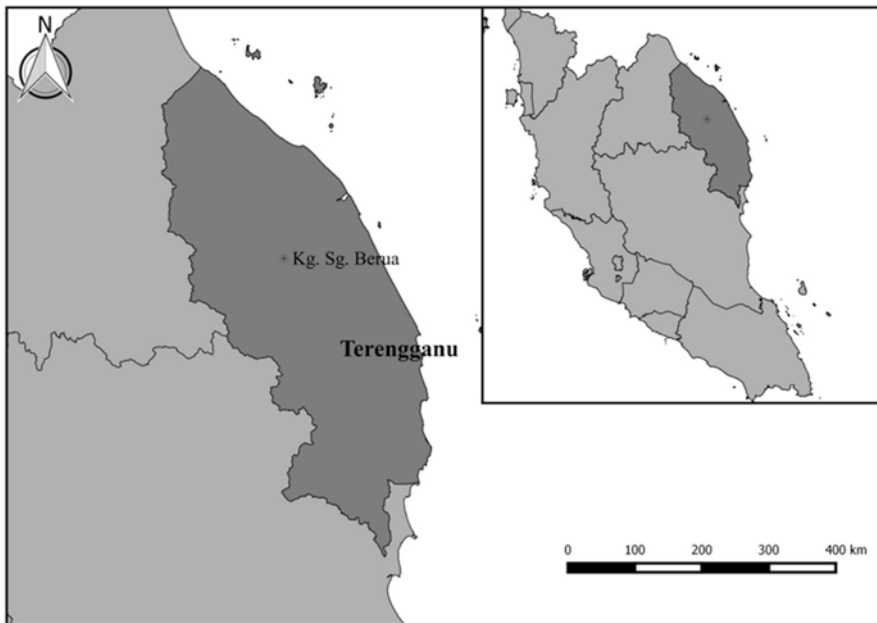


Fig. 1 Map showing the location of Kampung Sungai Berua in Kenyir, Hulu Terengganu, Terengganu

information of their hunted wildlife. The animals were also identified with the aid of pictures that were shown to the villagers. Pictures of available hunted animals were also photographed for in-situ identification purposes, according to the field guide of mammals (Francis 2008), reptiles (Indraneil 2010) and birds (Robson 2000). Besides that, other related data, such as the purpose of utilisation, method of catching and trading activities were also recorded.

Results and Discussion

In this survey, a total of 39 species from 22 wildlife families were recorded to have been utilised by the Orang Asli in Kampung Sungai Berua for the past 12 months (Table 1). The animals were categorised according to taxonomic order. The most utilised animals were mammals with 20 species, followed by reptiles (10 species) and birds (nine species). Of the total, 65% and 35% were listed as protected (P) and totally protected species (TP), respectively, under the Wildlife Conservation Act 2010. Four species of critically endangered animals (the river terrapin, red-eared slider, helmeted hornbill and Sunda pangolin) were found to have been utilised. One species categorised as an endangered — the spiny hill turtle — was also recorded. Six species of vulnerable animals were also hunted, which were the Malayan box turtle, black marsh turtle, Asian brown turtle, straw-headed bulbul, southern pig-tailed macaque and Sambar deer.

The Orang Asli used several methods to hunt wildlife, with blowpipes, snares, traps and spearguns. They mostly tracked the animal by their footprints. The Orang Asli were known for their traditional survival knowledge and familiarity with the forest terrain, and they possessed specific strategies in hunting wildlife (Table 2).

The survey revealed that hunted wildlife was for household consumption, medicinal purposes, as a source of income or kept as pets. Most animals were utilised for household consumption (Fig. 2). Based on the interviews, the three top animals considered as delicacies among the Orang Asli were porcupines, turtles and squirrels.

Economic and commercial activities also occurred between the Orang Asli and middlemen. Outsiders were no strangers to the Orang Asli as their trading relationship had long existed since the fifteenth century (Gianno & Bayr, 2009). High demand in the wildlife trade also drove the Orang Asli to become excellent hunters. Some of the prized animals caught could fetch a good price and significantly contribute to their wellbeing. Based on interviews with a few key informants, they get paid by middlemen based on the prices shown in Table 3.

This study identified eight species of animals used by the Orang Asli as traditional medicine (Table 4). Knowledge on how to use the animals for medicinal purposes was mainly held by traditional practitioners and elders. In this survey, three traditional practitioners were interviewed.

Based on our findings, it could be noted that wildlife hunting remained an important subsistence for the Orang Asli and it played an important role in many aspects

Table 1 A list of wildlife utilised by the Orang Asli in Kenyir, Terengganu

Order	Scientific Name	Common name	Semoq Beri name	Uses	WCA (2010)	IUCN
REPTILES						
Testudines	Geoemydidae	River terrapin	<i>Pa'as</i>	a, c, d	TP	CR
	<i>Batagur affinis</i>					
	<i>Cuora amboinensis</i>	Malayan box turtle	<i>Kerak keban</i>	a, d	P	VU
	<i>Heosemys spinosa</i>	Spiny hill turtle	<i>Ga'de</i>	c	P	EN
	<i>Siebenrockiella crassicolis</i>	Black marsh turtle	<i>Yo</i>	a, b, c	P	VU
	<i>Manouria emys</i>	Asian brown tortoise	<i>Sel</i>	c, d	P	VU
	Emydidae					
	<i>Trachemys scripta</i>	Red-eared slider	<i>Mong</i>	b, c	NA	CR
	Trionychidae					
	<i>Dogania subplana</i>	Malayan softshell turtle	<i>Pa'as</i>	c	P	LC
Squamata	Gekkonidae					
	<i>Gekko gecko</i>	Tokay gecko	<i>Che'eh</i>	c	P	NE
	Varanidae					
	<i>Varanus salvator</i>	Monitor lizard	<i>Sereng</i>	a	P	LC
	Pythonidae					
<i>Python reticulatus</i>	Reticulated python	<i>Tijo</i>	b, c	P	NE	
AVES						
Psittaciformes	Phasianidae					
	<i>Lophura ignita</i>	Crested fireback	<i>Burung pegar</i>	a	TP	NT
	<i>Gallus gallus</i>	Junglefowl	<i>Ayam hutan</i>	a, d	P	LC
Gruiformes	Rallidae					
	<i>Amauromis phoenicurus</i>	Waterhen	<i>Itik air</i>	a, b	P	NT
AVES						
Bucerotiformes	Bucerotidae					
	<i>Rhinoplax vigil</i>	Helmeted hornbill	<i>Burung melilin</i>	a, b, c	TP	CR
	<i>Buceros rhinoceros</i>	Rhinoceros hornbill	<i>Terang</i>	a, c	TP	NT
Columbiformes	Columbidae					
	<i>Chalcophaps indica</i>	Emerald dove	<i>Kawah kukur</i>	a	P	LC
Psittaciformes	Psittaculidae					
	<i>Psittinus cyanurus</i>	Blue-rumped parrot	<i>Kawah Serindit</i>	c, d	TP	NT

(continued)

Table 1 (continued)

Order	Scientific Name	Common name	Semoq Beri name	Uses	WCA (2010)	IUCN
	Sturnidae					
	<i>Gracula religiosa</i>	Common hill myna	<i>Kawah Tiong</i>	c, d	P	LC
Pycnonotidae	Passeriformes					
	<i>Pycnonotus zeylanicus</i>	Straw-headed bulbul	<i>Kawah Barau</i>	a	TP	VU
MAMMALS						
Pholidota	Manidae					
	<i>Manis javanica</i>	Sunda pangolin	<i>Pantuai</i>	b, c	TP	CR
Primates	Cercopithecidae					
	<i>Trachypithecus obscurus</i>	Dusky leaf monkey	<i>Basing</i>	c, d	P	NT
	<i>Macaca nemestrina</i>	Southern pig-tailed macaque	<i>Tadik</i>	c, d	P	VU
	<i>Macaca fascicularis</i>	Long-tailed macaque	<i>Penrok</i>	c, d	P	LC
Carnivora	Viverridae					
	<i>Viverra zangalunga</i>	Malayan civet	<i>Musang</i>	a	P	LC
	<i>Paradoxurus hermaphroditus</i>	Common palm civet	<i>Musang</i>	a	P	LC
Artiodactyla	Suidae					
	<i>Sus scrofa</i>	Wild boar	<i>Jalu</i>	a, c	TP	LC
MAMMALS						
Artiodactyla	Tragulidae					
	<i>Tragulus</i> sp.	Mouse deer	<i>Pelanduk</i>	a	P	LC
	Cervidae					
	<i>Rusa unicolor</i>	Sambar deer	<i>Rusa</i>	a	P	VU
	<i>Muntiacus muntjak</i>	Barking deer	<i>Bohol</i>	a	P	LC
Rodentia	Sciuridae					
	<i>Callosciurus notatus</i>	Plantain squirrel	<i>Cedek</i>	a, b	NA	LC
	<i>Callosciurus erythraeus</i>	Pallas's squirrel	<i>Lebir</i>	a, d	NA	LC
	<i>Callosciurus caniceps</i>	Grey-bellied squirrel	<i>Gahui</i>	a, d	NA	LC
	<i>Ratufa bicolor</i>	Black giant squirrel	<i>Daguan</i>	a	TP	NT
	<i>Petaurista petaurista</i>	Red giant flying squirrel	<i>Menuk</i>	d	TP	LC
	<i>Petaurista elegans</i>	Lesser giant flying squirrel	<i>Pawor</i>	d	TP	LC
	<i>Aeromys tephromelas</i>	Black giant flying squirrel	<i>Pati</i>	d	TP	DD

(continued)

Table 1 (continued)

Order	Scientific Name	Common name	Semoq Beri name	Uses	WCA (2010)	IUCN
	Spalacidae					
	<i>Rhizomys sumatrensis</i>	Indomalayan bamboo rat	<i>De'kan</i>	d	NA	LC
	Hystriidae					
	<i>Hystrix brachyura</i>	Malayan porcupine	<i>Landak</i>	a, b, c	P	LC
	<i>Atherurus macrourus</i>	Brush-tailed porcupine	<i>Landak</i>	a, b, c	P	LC

Uses = a: Food, b: Medicine, c: Trading, d: Pet), (Wildlife Conservation Act (2010) status = TP: Totally Protected Animal, P: Protected Animal, NA: Not Available), IUCN Red List categories = CR: Critically Endangered, E: Endangered, VU: Vulnerable, NT: Near Threatened, LC: Least Concern, NE: Not Evaluated, DD: Data Deficient

Table 2 List of tools and methods used by the Orang Asli to hunt for wildlife

Tools/ Weapon	Method	Wildlife
Blowpipe	Blowpipes are used alongside poison darts. They are used to hunt arboreal animals and birds. The longer the blowpipe, the farther its reach.	Squirrel Hornbill Deer
Snare	They are made of bamboo and nylon strings. Usually, snares will be left overnight and checked on the following day.	Porcupine
Speargun	Used to hunt larger animals.	Wild boar
Trap	Simple contraptions that are left overnight.	Deer Wild boar
Bare hands	Animals are tracked by following their footprints.	Pangolin Turtles

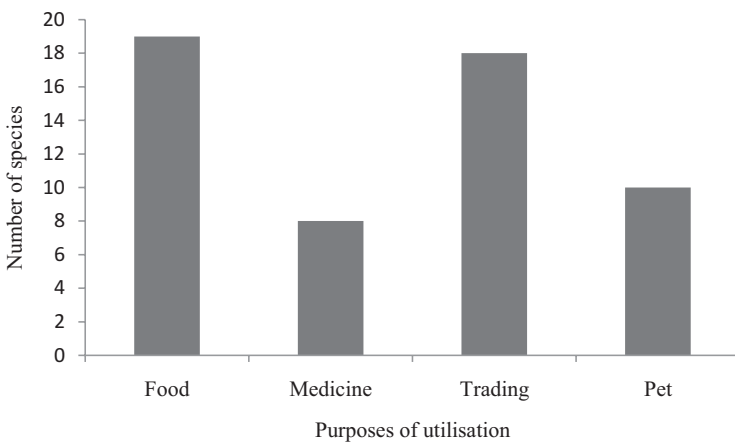


Fig. 2 The utilisation of hunted animals by the Semoq Beri sub-tribe in Kampung Sungai Berua, Hulu Terengganu

Table 3 The prices of animals paid by middlemen to Semoq Beri hunters in Kampung Sungai Berua, Hulu Terengganu

Animal	Price (RM)	Part used
Frogs	20 per kg	Meat
Turtles	4–8 per kg*	Meat
Monitor lizard	*	Whole body
Snake	18 per kg	Meat
Birds (hornbill, common hill myna, parrot)	*	Whole body
Pangolin	180–200 per kg	Meat, scale
Squirrel	20–30 per kg*	Whole body
Wild boar	*	Whole body
Deer	80 per kg	Whole body
Porcupine	10,000–30,000 per kg *	Black stone

*Price depending on animal size

of their life (Howell et al. 2010). Therefore, the survival of wildlife species should also be taken into consideration to maintain their heritage and existence. Conservation efforts were needed to maintain wildlife populations and its habitat so that the livelihood of the Orang Asli would not be compromised. As addressed by Benneth, by considering resource sustainability, the balance between short-term economic needs and long-term developmental and conservation needs could be evaluated.

Conclusion

This study has provided information on the wildlife utilised by the Orang Asli in Kampung Sungai Berua in Hulu Terengganu, Terengganu. Several wildlife species were identified as important to the Orang Asli for food, medicine, source of income and as pets. The Orang Asli had great traditional knowledge regarding the flora and fauna within the forests. The knowledge is practiced until now, and it has become their “bible” to ensure their livelihood and maintain their identity. The Orang Asli communities are hunter-gatherers and collectors of many types of forest resources. In the richness of the tropical forests with high biodiversity, the relationship between the wildlife and Orang Asli should be explored, as the social and economic well-being of the Orang Asli highly depends on good resource management. In addition, the sustainable management of the wildlife used by the Orang Asli must be considered. Therefore, future research should address the factors and resolve issues affecting wildlife utilisation by the Orang Asli.

Table 4 List of animals used for medicine

Scientific name	Common name	Uses	Part used	Mode Of uses
Emydidae				
<i>Trachemys scripta</i>	Red-eared slider	To treat internal pain.	Black stone	The black stone is boiled with water. The water is then drunk.
Pythonidae				
<i>Python reticulatus</i>	Reticulated python	Relieves heat in the body and fever.	Gall bladder	The gall bladder can be eaten raw or cooked until it becomes golden brown.
Elapidae				
<i>Ophiophagus hannah</i>	King cobra	Treat venomous bites.	Snake's venom	The snake's venom is applied on the affected area.
Rallidae				
<i>Amaurornis phoenicurus</i>	Waterhen	Gives energy.	Meat	The meat is grilled and consumed.
Bucerotidae				
<i>Rhinoplax vigil</i>	Helmeted hornbill	To treat internal pain and also used as an antidote.	Beak	The beak is scraped and mixed with boiling water. The water then is drunk.
Manidae				
<i>Manis javanica</i>	Sunda pangolin	Prevents illnesses caused by bad weather.	Scales and claws	The pangolin scales or claws are used as a necklace, aided with a spell.
Sciuridae				
<i>Callosciurus notatus</i>	Plaintain squirrel	Relieves heat in the body and maintain health and vitality.	Black stone	The black stone is boiled with water. The water is then drunk.
Hystricidae				
<i>Hystrix brachyura</i>	Porcupine	To treat various illnesses.	Black stone	The stone is soaked in water. The water is then drunk.

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