





Over 150 materials on display at new exhibition: Human X Nature: Environmental histories of Singapore





Singapore, 09 April 2021



ANNEX A

SELECTED HIGHLIGHTS FROM HUMAN X NATURE: ENVIRONMENTAL HISTORIES OF SINGAPORE EXHIBITION




S/N	Image Reference	Exhibition Highlight	Description
1		<p>The Ichthyological Atlas of the Dutch East Indies, published under the auspices of the Colonial Government of the Netherlands</p> <p>Pieter Bleeker, from 1862-1878</p> <p>Collection of the National Library, Singapore, donated by Marine Fisheries Research Department</p> <p><i>Section 1: Understanding Nature</i></p>	<p>This nine-volume series is one of the largest compilations on fish in the waters of the Malay Archipelago and contains 1,500 illustrations. The series was published by Pieter Bleeker (1819-1878), an ichthyologist and medical doctor employed by the Royal Netherlands East India Company. While Bleeker was stationed in Indonesia, he acquired specimens and information from local fishermen, over 12,000 of which now reside in the Natural History Museum in Leiden, Netherlands.</p>
2		<p>Map of The Island of Singapore and Its Dependencies</p> <p>1885</p> <p>Prepared and published by J. Von. Cuylenburg, Surveyor-General's Office, Singapore, and Major H.E. McCallum, Colonial Engineer and Surveyor-General, SS</p> <p>Collection of the National Archives of Singapore</p> <p><i>Section 2: Consuming Nature</i></p>	<p>Pepper and gambier plantation agriculture transformed Singapore's natural landscape. This 1885 map shows the presence of plantations at various <i>kangkars</i> (港脚, foot of the river) in Singapore's northern and western regions such as Sembawang and Tengah. It also indicates plantations that had been abandoned, seen in the absence of <i>bangsal</i> (sheds, in this case used for gambier boiling), in the previously prominent <i>kangkars</i> of Chan Chu Kang (alongside Seletar River) and Yio Chu Kang.</p> <p>By the early 20th century, the colonial land title system, which discouraged shifting cultivation, had driven many gambier planters from Singapore to start new plantations in Johor. Falling gambier prices and the exhaustion of the land further discouraged gambier and pepper cultivation. The era of gambier and pepper on Singapore island had ended.</p>

3	 <p>back of <i>Farancia jentiana</i>, &c., and drink the decoction when cold, and spray it over the whole body. See no. 365.</p> <p>Zingiber officinale, Rose.</p> <p>1432. Halya. Grik, 12378.—Tonic. The rhizome is eaten.</p> <p>1433. Halya. Kuala Kangsar, 13902.—Stomach ache. Boil the rhizome and drink the decoction.</p> <p>1434. Halya. Mersah. Kuala Kangsar, 14903.—Child birth. Boil the plant, and use the decoction as an uterine stimulant.</p> <p>1435. Kunyit. Teres. Batu Gajah, 13363.—Fever. Boil the plant and bark in the decoction.</p> <p>1436. Kunyit. Teres. Tapah, 13056.—Fever. The same.</p> <p>1437. Kunyit. Teres. Taiping Malak, 14022.—Rheumatism, &c. Boil the rhizome with rhizomes of <i>Kaempferia Galanga</i> and of <i>Acorus Calamus</i>, and ingest with the decoction.</p> <p>1438. Halya. Kuala Tembeling, 13847.—Ague in children. Pound the leaves with the leaves of <i>Acorus Calamus</i> in water, and sprinkle the water upon the child's face.</p> <p>1439. Halya. Benerah, 12377.—Stomach trouble. Eat a little of the leaves daily.</p> <p>Zingiber officinale, Rose, var.</p> <p>1460. Halya. Batu. Batu Gajah, 13363.—Fever. Boil the rhizome, and use the decoction in the bath.</p> <p>1461. Halya. Batu. Telok Anson, 14199.—Indigestion. Boil the rhizome with those of <i>Carex acutrostris</i> and <i>Zingiber Cassiniae</i>, and drink.</p>	<p>Malay Village Medicine: Prescriptions collected by I.H. Burkhill and Mohamed Haniff</p> <p>The Garden's Bulletin Straits Settlements Vol. VI (April 1930), No. 6-10</p> <p>Collection of the National Library, Singapore</p> <p>Section 1: Understanding Nature</p>	<p>This is remarkable for being one of the rare few publications on Malay medicine that credits a Malay naturalist as an author. Botanists Isaac Henry Burkhill (1870-1965) and Mohamed Haniff (1872-1830), long-time colleagues and collaborators, toured the Malay Peninsula consulting <i>bomohs</i> (medical practitioners) and <i>bidans</i> (mid-wives) for information on local medicines. Informants were asked to bring samples of medicinal plants, which were deposited in the Singapore Botanic Gardens Herbarium, and their characteristics and uses recorded.</p>
			<p>This page details the uses of plants in the Hibiscus family. Listed here is <i>Hibiscus rosa-sinensis</i> (<i>Bunga raya</i>), drunk as a tea or infusion and used to treat a variety of illnesses ranging from fevers, headaches and high blood pressure to venereal diseases.</p>
4		<p>Annual Report of the Director of Gardens</p> <p>Richard Eric Holttum (1895-1990) Singapore: 1937</p> <p>Collection of the National Library, Singapore</p> <p>Section 1: Understanding Nature</p>	<p>While being primarily objects of the study of natural history, there were instances of animals assisting humans in botanical research. This Annual Report by then Singapore Botanic Gardens Director Eric Holttum, in 1937 features a section on the unique story of Edred Henry Corner and his Botanical Monkeys. Corner employed monkeys as specimen collectors.</p> <p>Corner was Assistant Director at the Botanic Gardens at the time, and one of his primary interests was the study of trees in Malaya. A significant problem he encountered while collecting specimen was the retrieval of tree top leaves, fruits and flowers beyond human reach. The report mentions that most households across the Malay Peninsula had domesticated <i>Berok</i> Monkeys trained to collect fruit such as coconuts. Corner bought one such monkey from a man named Awang bin Salleh for about 28 Straits dollars (approximately S\$375 today).</p>

			<p>The monkeys were put under the care of Mohammed <u>Ngadiman</u>, a botanical collector and Herbarium assistant, and were deployed at Bukit <u>Timah</u> Hill daily, collecting hundreds of specimens. These monkeys are still credited as the collectors of some specimens in the Botanic Gardens Herbarium today.</p>
5		<p>Account of a new species of tapir in the peninsula of Malacca</p> <p>William Farquhar, A. Seton, Pierre-Medard Diard</p> <p>Asiatic Researches, Vol. XIII No. XI (1820/21)</p> <p>Collection of the National Library, Singapore</p>	<p>Prior to his position as First Resident of Singapore, William Farquhar (1774-1839) served as Resident and Commandant in Melaka for 15 years. Throughout that time, he was extremely active as a naturalist. He commissioned the capture and collection of plants and animals, and compiled information for publishing.</p> <p>This specimen of a Juvenile Tapir features its signature white-spotted brown coat. Tapirs change colour between four and seven months of age, a phenomenon observed by Farquhar when he kept a young tapir in his home.</p>
		<p>Juvenile Tapir Specimen</p> <p>On loan from Lee Kong <u>Chian</u> Natural History Museum</p> <p>Section 1: Understanding Nature</p>	<p>According to his account, his tapir was very easily domesticated and had become something of a house pet, "as tame and familiar as any of the dogs about the house", feeding "indiscriminately on all kinds of vegetables, and was very fond of attending at the table to receive bread, cakes, or the like". Unfortunately, the animal died suddenly after six months of living in Farquhar's home.</p>
6		<p>The Chinaman abroad, or, a desultory account of the Malayan Archipelago, particularly of Java.</p> <p>Ong Tae Hae (汪大海)</p> <p>Shanghai: 1849</p>	<p>Originally published in 1791, Ong Tae <u>Hae's</u> account of his travels through the Malayan Archipelago is a rare 18th century Chinese travelogue of the region. While trade within China was thriving at the time, few travel writings by Chinese writers emerged beyond China's borders or tribute states. This 1849 edition includes names in the original Chinese, as well as the occasional Latin identification. It was translated into</p>

		<p>Collection of the National Library, Singapore</p> <p><i>Section 1: Understanding Nature</i></p>	<p>English by missionary Walter <u>Medhurst</u> from the London Missionary Society in Singapore.</p> <p>Ong Tae Hae was a merchant and scholar who left China on a ten-year journey of trade and exploration <u>between 1793-1794</u>. His account of his travels describes the places he visits, people he encountered both foreign and indigenous, cultural objects, customs and medicines, as well as an extensive section on plants, animals, minerals and geography.</p> <p>This page shows his descriptions of the various fruits he came across, including <u>Salak</u>, <u>Mangosteen</u>, Areca, and Durian, providing an interesting perspective on local produce.</p>
11		<p>Map of the Island of Singapore and its Dependencies: to accompany Report on the Forest Administration in the Straits Settlements</p> <p>Executed by the Colonial Engineer and Surveyor General of the Straits Settlements in 1898</p>	<p>This 1898 map shows the forest reserves, marked in <u>green</u>, that existed on the island at the turn of the 20th century. The town reserves supplied timber for constructing the main town settlement; the coastal reserves provided fuel and prevented soil erosion; and the interior reserves protected streams and water supplies like the Impounding Reservoir.</p> <p>In the 1880s, Nathaniel <u>Cantley</u> (1847-1888), Superintendent of the Singapore Botanic Gardens, was tasked with reinvigorating a natural landscape</p>

		Collection of the National Library, Singapore <i>Section 2: Consuming Nature</i>	that had been overtaken by plantation agriculture. <u>Cantley</u> established forestry programmes to encourage the sustainable consumption of nature, including the gazetting of Singapore's earliest forest reserves. From 1885 to 1898, the Forest Department <u>gazetted</u> more forest reserves and <u>expanded</u> existing ones, with the goal of eradicating the <u>alang</u> weed and producing more timber resources for the colony.
9		The Story of the Rubber Industry, with an appendix by L. Lewton-Brain, showing the growth of the rubber industry in Malaya from 1905 to 1912 Henry Nicholas Ridley Collection of the National Library, Singapore <i>Section 2: Consuming Nature</i>	The commercial cultivation of rubber in Malaya was pioneered by Henry Ridley (1855-1956), the first director of the Singapore Botanic Gardens. Ridley refined the herring-bone method of tapping rubber, which protected the rubber tree from damage. This ensured that rubber trees had a latex-producing lifespan of over 20 years, allowing planters to cultivate the crop on a mass scale globally for the first time. This pamphlet was created by Ridley to encourage planters to take up rubber planting. He outlines the history of rubber cultivation, best tapping practices and preparation methods, and rubber's economic potential and output in Malaya. Shown here is a photograph of Ridley standing next to a Brazilian rubber tree with herring-bone incisions in the Singapore Botanic Gardens, where he served as
			director. Ridley was known to fill his jacket pockets with fresh rubber seeds and then stuff them into the pockets of uninterested planters to persuade them to plant rubber. These actions later earned him the nicknames "Mad Ridley" and "Rubber Ridley".
10		An Outline of Malayan Agriculture Donald Honey Grist 1936 Collection of the National Library, Singapore <i>Section 2: Consuming Nature</i>	This handbook describes agricultural conditions, cultivation methods, production costs and trading prices of various crops in Malaya. Such publications were produced to disseminate knowledge on the colonial agricultural enterprise to planters around Malaya. Shown here are details of the <u>gambier</u> manufacturing process. Gambier was commonly produced and sold in two forms – a "block" (or "bale") and "cube" (or "round"). Gambier cubes were first left out on racks in the sun to dry for one to two days, before being heated near the furnace to complete its drying process. Gambier bales, in contrast, were subjected to a shorter drying period before being packed in grass matting for the market.

8		<p>Japanese Printing Block and Accompanying Print</p> <p><i>Metal plate attached to a wood block</i></p> <p>Illustration by Kiyohiko Watanabe Singapore: c. 1944</p> <p>On loan from the Collection of Singapore Botanic Gardens Archives, National Parks Board</p> <p><i>Section 1: Understanding Nature</i></p>	<p>Japanese scientists in Singapore were as invested in the many uses of local flora and fauna as the British. This printing block was used to print illustrations for a 1944 book, <i>Useful Plants from the Southern Region</i>. The book was written and illustrated by Kiyohiko Watanabe, a Japanese botanist, and assistant of then Singapore Botanic Gardens Director, Kwan Koriha. The research information had been yielded from the staff of the Singapore Botanic Gardens, as well as other institutions under Japanese control at the time.</p> <p>The plant species illustrated by this printing block was Quassia indica (labelled Samadera indica), also known as the Niepa Bark Tree or Kacang-kacang in Malay. Its wood was commonly used in the region for Parang and other knife handles due to its hardy nature. Various parts of the tree are used in traditional Malay and Ayurvedic medicine to treat various ailments including stomach aches, fevers, and head lice. It is also commonly used as an organic insecticide.</p>
12		<p>An introduction to mammals of Singapore and Malaya</p> <p>John Leonard Harrison, 1966</p> <p>Collection of the National Library, Singapore</p> <p><i>Section 3: Remaking Nature</i></p>	<p>This book by John Harrison (1917-1972), Professor of Zoology at the University of Singapore, is the first-ever publication of the Malayan Nature Society, and the first complete account of all mammals in Singapore and Malaya.</p> <p>In the introduction, Harrison encourages the reader to venture out, discover and document such animals. As he writes, "a good deal is known about Malayan mammals... [and] written about them, but a great deal remains to be discovered. It is you, the reader, who is going to make these discoveries; it is your observations, duly recorded in your notebooks, which are going to provide the material for future books."</p>
13		<p>Flowers of Singapore: Special Stamp Issues 10th Tree Planting Day (1980)</p> <p>Collection of the National Archives of Singapore.</p> <p><i>Section 3: Remaking Nature</i></p>	<p>This poster features a commemorative stamp collection issued to celebrate the 10th anniversary of Tree Planting Day. The stamps feature commonly seen flowers in Singapore such as the Ixora and Bougainvillea. Tree Planting Day began in 1971 as a part of the Garden City Campaign.</p>