

UNENDING WILDERNESS: THE HISTORY OF CONSERVATION IN DUTCH-BORNEO, 1930's-1940's

Bahagio Raharjo¹, Devi Itawan²

¹ Program Studi Sejarah, Universitas Diponegoro

² Program Studi, Universitas Jambi

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Author email:

¹bahagioraharjo@lecturer.undip.ac.id

²devi.itawan@unja.ac.id

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ABSTRACT

In the history of conservation in colonial Indonesia, Dutch Borneo was the last islands to have conservation site. Until 1930's, Dutch Borneo was considered had extensive primeval forest cover compared to other region in the Outer Island. However, along with the strengthening conservation idea, Dutch East Indies Conservation Association encouraged the colonial government to establish conservation sites in Borneo since the 1920s. By applying historical method and deploy Politic Ecology approach, this study aims to unfolding the conservation discourse behind the establishment of the earliest conservation areas in Dutch Kalimantan. This study uses newspaper, colonial scientific journal and, reports and bulletin of Dutch East Indies Conservation Association as its main sources. The study show that the conservation policy in colonial Dutch Borneo was rooted in extinction idea intertwined with colonial gaze of tropical exotism. Moreover, the lack of authority generate conservation policy in Dutch Borneo merely thrive in symbolic sphere.

Keywords: conservation, Dutch Borneo, environmentalism, colonialism.

INTRODUCTION

The birth of modern environmentalism and conservation cannot be separated from the history of Western expansion in tropical regions. Grove emphasized that the historical roots of modern environmentalism could be traced back to the beginning of European colonization of tropical regions.¹ Deforestation caused by the expansion of Western colonization drove environmental awareness which then led to the urge to nature protection through conservation. In the history of Western colonial expansion, the idea of nature protection developed in line with the colonial agenda. Therefore, nature protection at that time often had orientalist and colonial political nuances in its practice.²

In the history of colonial Indonesia, the idea of nature protection initially emerged along with the widespread deforestation in the mountainous areas of Java since the mid-19th century. At that time, scientists and colonial officer were concerned that deforestation in the mountainous areas could cause various hydrological problems such as decreased rainfall, lack of humidity, reduced water supply, and the threat of flooding.³ These environmental problems were certainly not beneficial for agriculture, which were the backbone of colonial exploitation in Java at that time.⁴ Therefore, at the end of the 19th century, the colonial government began to created forest reserves in the mountainous areas. The interests of colonial exploitation also became the reason of the protection of certain types of animals, as stated in the animal protection law issued by the colonial government in 1910.⁵

Furthermore, the spread of the idea and practice of nature protection and the establishment of conservation areas in colonial Indonesia cannot be separated from the role of colonial conservation organizations, such as the *Nederlandsch-Indische Vereeniging tot Natuur-bescherming* (Dutch East Indies Nature Conservation Society) founded in 1912 and *the Nederlandsch-Indische Natuurhistorische Vereeniging* (Dutch East Indies Natural History Association) founded in 1911. These organizations absorbed the influence of international nature protection discourse and manifesting the idea in the form of activism. They actively proposed and advocated the establishment of conservation areas in the form of nature reserves (*natuurmonumenten*) and wildlife

¹ Richard H Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge University Press, 1996); Richard H Grove, 'Origins of Western Environmentalism', *Scientific American*, 267.1 (1992), 42–47.

² Peter Boomgaard, 'Oriental Nature, Its Friends and Its Enemies: Conservation of Nature in Late-Colonial Indonesia, 1889-1949', *Environment and History*, 5.3 (1999), 257–92.

³ Boomgaard, 'Oriental Nature, Its Friends and Its Enemies: Conservation of Nature in Late-Colonial Indonesia, 1889-1949'.

⁴ Peter Boomgaard, 'Oriental Nature, Its Friends and Its Enemies: Conservation of Nature in Late-Colonial Indonesia, 1889-1949', *Environment and History*, 5.3 (1999), 257–92.

⁵ Robert Cribb, 'Conservation in Colonial Indonesia', *Interventions*, 9.1 (2007), 49–61.

sanctuaries (*wildereservaten*). The *Nerdelansch-Indische Vereeniging tot Natuur-bescherming* succeeded in forming a 6 ha protected forest area in Depok in 1913.⁶

Conservation exertion reached a turning point when the colonial government issued a wildlife protection law in 1909, followed by a nature reserve law in 1916. With the issuance of these two laws, the number of conservation areas throughout colonial Indonesia continued to increase.⁷ However, until the late colonial period, most conservation areas were located on the islands of Java and Sumatra. Until 1940, Java had 88 conservation areas and Sumatra had 32 nature conservation areas. Meanwhile, other islands outside Java and Sumatra only had very few nature conservation areas. Sulawesi had 6 nature conservation areas, Lesser Sunda had 1 area, Maluku had 1 area, and Papua had 1 area, while Dutch Borneo only had 6 areas. In other word, the number of conservation areas outside Java and Sumatra, especially in Dutch Borneo, was minuscule compared to its area.⁸

In Dutch Borneo, conservation area were only established in 1934. The first nature reserve area established was Padang Luwai, covering an area of 1080 ha in Southeast Kalimantan, followed by the Mandor nature reserve covering an area of 195 ha and Lo Pat Foen Pi covering an area of 8 ha in West Borneo.⁹ It was only in 1939 that the number of these areas doubled with the establishment of 3 wildlife sanctuaries covering an area of 600,000 ha. The establishment of conservation areas in Dutch Borneo was relatively late compared to other areas outside Java. This fact contradicts the spirit of colonial nature protection, considering the potential biodiversity that Dutch Borneo had at that time. Dutch Borneo is home to endemic and exotic flora and fauna, such as Borneo orchids, orangutans, proboscis monkeys, rhinos, and others.

Until the late of colonial state, Dutch Borneo had only a few conservation areas compared to other regions outside Java. The increase in the number of conservation areas in Kalimantan, Indonesia, only occurred in the 1980s and 1990s,¹⁰ along with the increasing environmental problems caused by massive natural resource extraction during the New Order era.¹¹ Therefore, studies on conservation in Kalimantan have

⁶ Boomgaard, 'Oriental Nature, Its Friends and Its Enemies: Conservation of Nature in Late-Colonial Indonesia, 1889-1949'.

⁷ Boomgaard, 'Oriental Nature, Its Friends and Its Enemies: Conservation of Nature in Late-Colonial Indonesia, 1889-1949', p. 265.

⁸ C. G. G. J. VAN STEENIS, 'NATUURBESCHERMING IN NEDERLANDSCH-INDIË VAN BOTANISCH STANDPUNT', *Natuurkundig Tijdschrift Voor Nederlandsch Indië*, 99 (1939), p. 154.

⁹ Anonym, 'WILDRESERVATEN IN INDIË. Thans Ook in Borneo.', *De Indische Courant*, 31 December 1936.

¹⁰ Kementerian Lingkungan Hidup dan Kehutanan, *Informasi 521: Kawasan Konservasi Regional Kalimantan-Sulawesi* (Bogor: Kementerian Lingkungan Hidup dan Kehutanan, 2016).

¹¹ Freek Colombijn, 'Global and Local Perspectives on Indonesia's Environmental Problems and the Role of NGOs', *Bijdragen Tot de Taal-, Land-En Volkenkunde*, 154.2 (1998), 305–34.

focused more on the post-colonial period¹² emphasizing on conservation politics,¹³ models,¹⁴ and conflict.¹⁵ However, the early emergence of conservation by the colonial state in Indonesian Kalimantan have not been widely studied, while most conservation and natural resource management policies today are rooted in colonial conservation discourse. Given this issue, this study explores the nature protection discourse behind the establishment of conservation sites in Dutch Borneo during the end of the colonial state.

METHOD

This study apply historical method with political ecology approach. The main sources of this study was the Dutch East Indies Nature Conservation Society's bulletin, and colonial scientific journal and newspaper. In unfolding the nature protection and conservation discourse, at first, this study identifies the conservation sites in Dutch Kalimantan, to then trace what colonial agendas and what kind of protection ideas are the basis for the establishment of these conservation areas. Identification conservation sites in Kalimantan are carried out by referring to maps of conservation areas created by the colonial officer or colonial scientist whose join Dutch East Indies Nature Conservation Society. Then, the conservation discourse is examined through unfolding the debates and discussions in newspaper articles and journals related to conservation in Dutch Kalimantan.

¹² Rob Stuebing and Yayasan Ulin Indonesia, 'Mesangat: A Conservation History', *Yayasan Ulin (Ironwood Foundation) Indonesia*, 2019; Wim Giesen and Julia Aglionby, 'Introduction to Danau Sentarum National Park, West Kalimantan, Indonesia', *Borneo Research Bulletin*, 31 (2000), 5–28; Reed L Wadley, *Histories of the Borneo Environment: Economic, Political and Social Dimensions of Change and Continuity* (Brill, 2022), CCXXXI.

¹³ Greg Acciaioli and Suraya Afiff, 'Neoliberal Conservation in Central Kalimantan, Indonesia: Evaluating the Approach to Environmental Education of the Transnational Conservation Organisation Rare', *Indonesia and the Malay World*, 46.136 (2018), 241–62.

¹⁴ Cristina Eghenter, 'Chapter Eight Social, Environmental and Legal Dimensions of Adat as an Instrument of Conservation in East Kalimantan', *State, Communities and Forests in Contemporary Borneo*, 2006, 163; Reed L Wadley and Carol J Pierce Colfer, 'Sacred Forest, Hunting, and Conservation in West Kalimantan, Indonesia', *Human Ecology*, 32 (2004), 313–38; W de Jong, 'Forest Products and Local Forest Management in West Kalimantan, Indonesia: Implications for Conservation and Development.', 2002.

¹⁵ Reed Wadley, 'The History of Displacement and Forced Settlement in West Kalimantan, Indonesia', *Conservation and Indigenous Mobile Peoples: Displacement, Forced Settlement and Sustainable Development*, 2002, 313–28; Franky Zamzani and others, 'Deforestation and Agricultural Expansion Processes in Gunung Palung National Park, West Kalimantan, Indonesia', *Jurnal Manajemen Hutan Tropika*, 15.1 (2009), 24–31.

RESULT AND DISCUSSION

Dutch Borneo in colonial conservation discourse

Dutch Borneo was the last region in colonial Indonesia to have a nature reserve or wildlife reserve. Since the 1920s, other islands in the Outer Islands Provinces, such as Sumatra, Celebes, Lesser Sunda, and New Guinea, have had conservation sites.¹⁶ The late in establishing conservation sites was due to the assumption that its forests were still vast and in relatively good condition. Dutch Borneo was estimated to have extensive forest cover, with much of it still unexplored and unexploited by the colonial government.¹⁷

Although Dutch Borneo was not a major concern for the colonial government in terms of conservation policy implementation, naturalists -member of Dutch East Indies Nature Conservation Society- and colonial officer had been pushing for the establishment of nature reserves and wildlife sanctuaries since the 1920s.¹⁸ The naturalist considered that the biggest threat to Dutch Borneo's forests and endemic species was its own local population. The colonial gaze centre accuses the local population of lacking the will and ability to protect nature because the local economy relies heavily on extracting nature, such as hunting and poaching protected animals, and practicing shifting cultivation.¹⁹

Hunting and poaching was a complex issue in Dutch Borneo. Until the 1930s, there were no firm hunting regulations act as in Java and Madura. However, in the directly governed and self-governing region, a wildlife protection law was enacted in 1931. Dutch Borneo itself was home to many protected animals, such as the orangutan, siamang, proboscis monkey, tarsier, Sumatran rhinoceros, pangolin, swift, white-rumped merabou stork, kingfisher, hornbill, trogon, maned dove, sparrow, legless sparrow, black stork, white and black ibis, red night heron and pelican.²⁰

Although the colonial government passed animal protection laws, it was difficult to prevent the poaching of protected animals in practice, especially in Dutch Borneo. This was due to the high market demand for products derived from endangered animals, such as rhino horns, hooves, and skins. Rhino horns, hooves, and skins have long been traded for use in Chinese medicine. The Chinese believed that these rhino body parts could provide strength and offer miraculous cures. By the 1930s, the colonial government had banned the export of rhino horns and hooves, imposing penalties on those who violated the ban. However, the Chinese living on the west coast

¹⁶ Dr. K.W. Dammerman, *Nederlandsch-Indische Vereeniging Tot Natuurbescherming Mededeeling No. 8 Overzicht Der Nedelandsch-Indische Natuurmonumenten*, 1924.

¹⁷ Anonym, 'ARCHIPEL Eerste Wildreservaat Op Borneo. PRACHTIGE INSTELLING. Bescherming van Neusaap, Orang Oetan. Banteng En Rhinoceros', *De Sumatra Post*, 7 November 1936.

¹⁸ Dr. K.W. Dammerman, p. 14.

¹⁹ C. G. G. J. VAN STEENIS, p. 150.

²⁰ *3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia* (Batavia, 1939), p. 378.

of Borneo continue bought rhino poaching at high prices. The illegal market drove poaching in Borneo's primeval forests by the Punan, Dayak, and Malay.²¹

The hunting of protected species was also driven by the practice of keeping or using animal parts for decorative purposes. Orangutans are often hunted by the Dayak and Punan peoples for use as pets. They were usually taken from the forest when they are young and sold. It was not uncommon for colonial officer to keep orangutans and siamangs as pets. The Dayak and Punan people also hunt siamangs for their gallstones.²²

While protected animals were completely banned from hunting and trade, some animals were allowed to be hunted because they were not considered rare. There were animals that can be hunted, but with certain permits and conditions from the local colonial officer. Animals such as elephants, banteng, deer, antelope, and pygmy deer can be hunted. The colonial officer have authority to issue permit for the hunting of elephants and bulls for a maximum period of six months. In this region, elephants were found in Sembakung. Deer, antelope, and pygmy deer could be hunted all year round except September and October, which are the breeding seasons. In hunting deer, antelope, and pygmy deer, trapping methods such as burning land, using spring spears, and traps were prohibited.²³

Conservation discourse in Dutch Borneo is not only about protecting the fauna, but also the flora. Based on statistic, Dutch Borneo's forest cover was extensive compared to the rest of the region. However, naturalists feared that agricultural expansion, could threaten the existence of primeval forests. However, it seems that concerns about agricultural expansion were directed more towards the agricultural activity of the local population. By the 1930s, shifting cultivation had become a point of contention among colonial foresters and naturalists. It was considered the main cause of the loss of primeval forests outside Java, ignoring the fact that the expansion of large plantations had also contributed to the deforestation. In Dutch Borneo, the local self-government responded to this problem by issuing restrictions on cultivation. For Instance, the Sultan of Kutai issued circular No. 1749/22-ZB on July 10, 1935, with a supplement No. 2398/22-ZB in October 1935, restricting shifting cultivation to secondary forest or scrub areas with the intention of conserving primeval forests.²⁴

On the other hand, flora conservation in Dutch Borneo is primarily aimed to protecting particular species of flower, i.e. the orchid. Borneo's forests were believed

²¹ Anonym, 'ARCHIPEL Eerste Wildreservaat Op Borneo. PRACHTIGE INSTELLING. Bescherming van Neusaap, Orang Oetan. Banteng En Rhinoceros'.

²² 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, pp. 389–90.

²³ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, pp. 391–92.

²⁴ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 381.

to be home to thousands of rare and exotic orchid species. Orchids are a symbol of the beauty and exoticism of tropical forests. Since the early 20th century, orchids have become a popular ornamental flower commodity in Europe.²⁵ The effort to protect orchids in its habitat was the strongest reasons for the establishment of nature reserve in Dutch Borneo. It appear that the concern for orchids conservation issues in Borneo urged not by in their ecological significance, but by their aesthetic value and exoticism.²⁶

Southeast Kalimantan (Zuid - Oost Borneo)

Southeast Kalimantan was one of the regions that experienced rapid economic development after the Dutch colonial expansion. In this region, a handful of Dutch colonial administrator and private entrepreneurs succeeded in building various extractive industry sectors such as plantations, mining, and forestry. Petroleum, coal, and forest products were the main export commodities that have integrated Southeast Kalimantan with the world market. Meanwhile, the rubber boom also helped revive the indigenous business group.²⁷ Interestingly, although the extractive industry sector was growing rapidly, the area of forest cover was still relatively large, which was around 89% of its area in 1930's.²⁸

²⁵ Anonym, 'Orchideeën in Nederland.', *Het Nieuws van Den Dag Voor Nederlandsch-Indië*, 15 December 1931.

²⁶ De Nederlandch-Indische Vereeniging tot Natuurbescherming, *Album van Natuurmonumenten in Nederlandsch-Indie*, 1937; Anonym, 'ARCHIPEL Eerste Wildreservaat Op Borneo. PRACHTIGE INSTELLING. Bescherming van Neusaap, Orang Oetan. Banteng En Rhinoceros'.

²⁷ J Thomas Lindblad and Peter E F Verhagen, *Between Dayak and Dutch: The Economic History of Southeast Kalimantan 1880-1942* (Foris Publications Dordrecht, 1988); J Thomas Lindblad, 'Economic Change in Southeast Kalimantan 1880-1940', *Bulletin of Indonesian Economic Studies*, 21.3 (1985), 69-103.

²⁸ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 374.

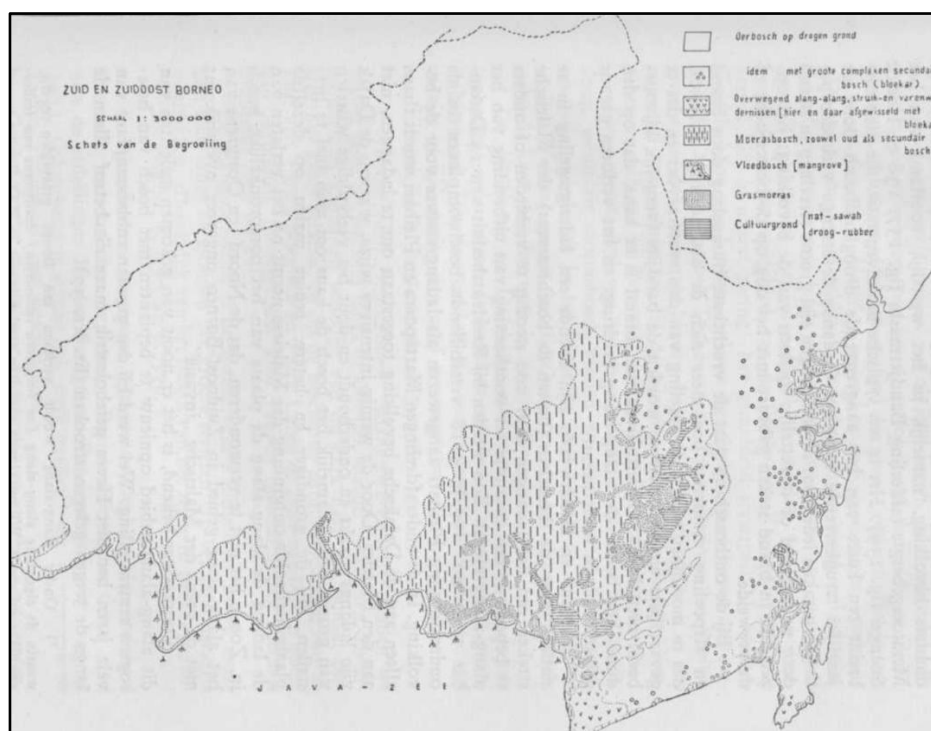


Figure 1. Map of Southeast Borneo Landscape

Source: 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 337.

Based on maps from the 1930s, the landscape of Southeast Kalimantan was still dominated by primeval forests. Most of these primeval forests was located on the hinterland. In contrast, the coastal landscape had generally changed into secondary forests, swamp forests, reeds and agricultural land. However, concerns about the extinction of Borneo's endemic flora and fauna led the naturalist to propose the creation of nature reserves and wildlife sanctuaries in the area.²⁹

Padang Loewai Nature Reserve.

The first designated nature reserve in Southeast Kalimantan, and indeed the entire Dutch Borneo region, was the Padang Loewai Nature Reserve in Kutai. The reserve was established through a self-government decree (ZB 11-10-1934 No. 72/22) and covers an area of 1,080 hectares. The Dutch East Indies Conservation Association had urged the establishment of this nature reserve since 1932, following Mr H. Witkamp's report and proposal. The reserve is located approximately 90 metres above sea level within the watershed of the Mahakam River and its tributary, the Kedang Pahoe. Morphologically, it belongs to the Tanjung plateau, but administratively, it falls within the West Kutai district of Samarinda. The reserve is home to xeromorphic flora, including shrubs, grasslands, and moss-covered peat soils, which often host *Schizaea* orchids and ferns. Meanwhile, the variety of animal life in this area is not significant.

²⁹ Anonym, 'WILDRESERVATEN IN INDIË. Thans Ook in Borneo.', *De Indische Courant*, 31 December 1936.

According to Witkamp's records, the only rare animals in this area are three species of pygmy parrot.³⁰

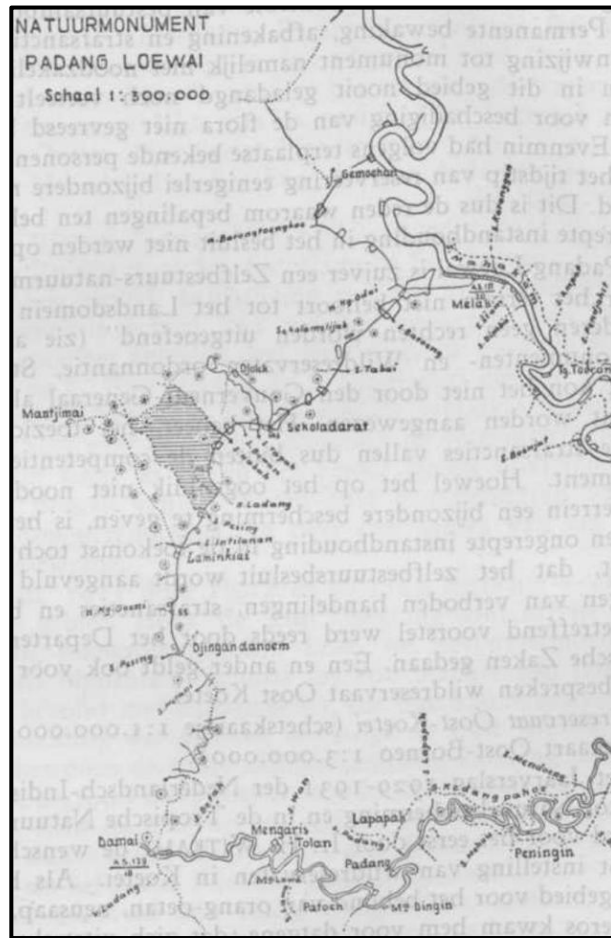


Figure 1. Map of Padang Luwai Nature Reserve

Source: Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 383.

Following its designation as a nature reserve, Padang Loewai received no special supervision apart from the occasional inspection by colonial officials. Supervision, demonstrations, and punishment were not deemed necessary as the area was distant from any farming or cattle ranching activities that could have damaged the habitat of the flora and fauna of Padang Loewai. The loose boundaries of the nature reserve were also due to the fact that Padang Loewai was not under the direct administration of the colonial government, meaning it had no legal authority over the area.³¹

³⁰ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 383.

³¹ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 383.

The East Kutai Wildlife Reserve

The East Kutai Wildlife Reserve was the first wildlife reserve to be established in Dutch Borneo. The area was first reported by Ir. H. Witkamp, a geologist and a member of the Dutch East Indies Nature Conservation Association's in 1929. Initially, Witkamp surveyed the area to explore its economic potential. However, he realised that it was home to rare animals such as orangutans, proboscis monkeys, bulls, clouded leopards, and rhinos.³²

The proposed East Koetai conservation area initially stretched from the Mahakam in the south to the Makassar Strait and Sangkulirang Bay in the east, and from Sei Miau in the north to Sei Wahau, Sei Telen, and Kedang Rantau in the west. However, it was rejected due to its potential for agricultural, forestry, and mining exploitation. Following discussions, correspondence, and negotiations with the Dutch East Indies Nature Conservation Association, the Koetai Sultanate established the East Koetai wildlife reserve conservation area through *Zelfbestuur Decree* No. 80-22, dated 25 July 1936. The approved conservation area was, however, smaller than initially proposed at around 306,602 hectares.³³

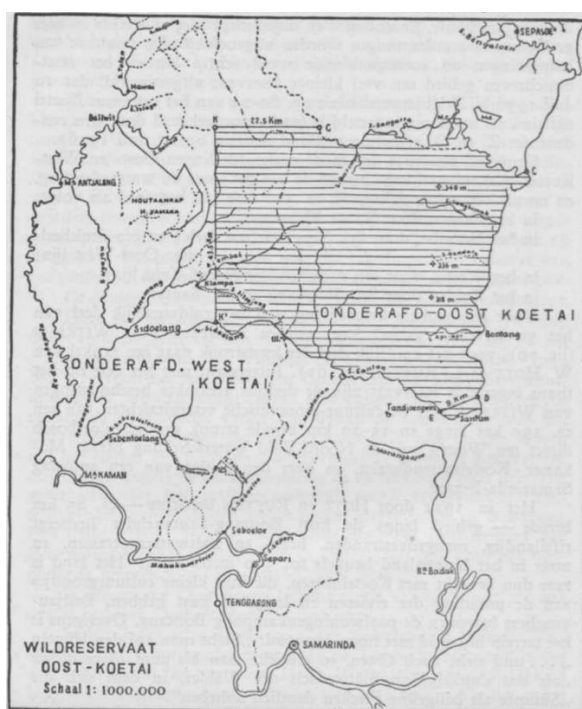


Figure 1. Map of East Kutai Wildlife Reserve

Source: 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 386.

³² 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, pp. 384–85.

³³ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, pp. 384–85.

The presence of rhinos is one of the main reasons why this area was designated a wildlife reserve. According to Witkamp, who lived in East Kutai from 1905 to 1907, the rhino population was believed to be substantial, as evidenced by tracks and remains of food. However, in 1930, a renowned rhino hunter moved to East Kutai, followed by other experienced hunters to Sebantoeloeng Hulu and Menamang Hulu. Consequently, Witkamp suspects that the rhino population in the East Kutai wildlife reserve had declined dramatically by the 1930s. In addition to the threat of poaching, the reserve also faced the problem of demarcation line violations due to oil export activities in Sengata Hilur, Sangkimah, and the Makassar Strait. These activities have caused the area of the reserve to decrease by approximately 24,000 hectares.³⁴

The Sampit-Kotawaringin Wildlife Reserve.

This conservation area was established in 1930 when J.P. Zond, the head of the forestry service, proposed creating a wildlife reserve in the border area between Sampit and Kotawaringin. This reserve would be managed by both the colonial and local governments. Sampit was a direct territory of the colonial government, while Kotawaringin was ruled by the Kotawaringin Sultanate. The reserve was established to protect endemic species, particularly orangutans, proboscis monkeys (bekantan), bantengs, and rhinos. However, the rhino population was found in the northernmost part of the conservation area at that time, and this did not provide adequate protection for the rhinos unless the herd resettled in the area.³⁵

This wildlife reserve area was first established in June 1936 by the Sultan of Kotawaringin. Only a year later, on August 18, 1937, the colonial government followed up by establishing a natural conservation area in Sampit with a government decree dated August 18, 1937, No. 39, Stbl. No. 495). These two areas combined to form the Sampit-Kotawaringin wildlife reserve, covering around 350,000 hectares. It is the largest reserve in Dutch Borneo.³⁶

Forest reservation.

In addition to protecting certain species of flora and fauna, conservation areas are established in the form of reservation forests for various purposes, such as protecting ecosystems and hydrological functions, or for the future exploitation of timber and forest products. Until the 1930s, there were at least four such areas in Southeast Kalimantan. One of these was the Meratus Mountains reservation forest, which covered around 650,000 hectares. This area was established in May 1926 by

³⁴ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, pp. 385–86.

³⁵ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 386.

³⁶ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 387.

government decree no. 33; 2) the Kukusan reservation forest, which covers 10,000 hectares and was designated by government decree no. 10 and 11 on 10 February 1928; 3) The Kukusan reservation forest, covering 10,000 hectares, was established by government decree on 10 February 1928, numbers 10 and 11; The Sebatung Mountain reservation forest, with an area of 75,000 hectares, was established by government decree on 26 November 1924, no. 25. The fourth was the Sei Wain protected forest in Balikpapan, covering 10,000 hectares. Of these four protected forest areas, only Sei Wain is designated for protecting hydrological functions. The other three are intended for wildlife reserve and future forest exploitation.³⁷

West Kalimantan (Borneo Wester District)

In contrast to Southeast Kalimantan, only about 50% of the primeval forest in West Borneo remained by the 1930s. The disappearance of primeval forests in West Kalimantan began in the 18th century with the expansion of gold mining by Chinese Kongsis. Over the next century, agriculture expansion by other immigrant groups further altered the landscape of West Kalimantan, particularly in its coastal regions. The Dutch East Indies Conservation Association noted this loss of forest and recommended the establishment of nature reserves in active gold mining concession areas.³⁸

The Mandor Nature Reserve

It was the first conservation area to be established in West Kalimantan. Located in the Mempawah district, it is administratively under the control of the Pontianak government. Mandor is a gold mining area that has been active since the 18th century. The area is filled with former gold mines and active mining concessions. However, the area also contains sandstone plateaus that often support xeromorphic vegetation. The emergence of Borneo's endemic orchids was one of the reasons for establishing the nature reserve in this region. The main reason for establishing the Mandor nature reserve was concern over the loss of orchids in their habitat due to the expansion of mining concessions.³⁹

Commans De Ruiter initially proposed the creation of a 33,400-hectare nature reserve to the Pontianak local government. However, the local government only approved 195 hectares for conservation. The Mandor nature reserve was established by a government decree in Pontianak on 16 March 1937. Efforts to establish a large nature reserve in Mandor were difficult to realise due to the active gold mining concessions in the area. Nevertheless, the reserve area was expanded to

³⁷ 3 *Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia*.

³⁸ Mary F Somers Heidhues, *Goldiggers, Farmers, and Traders in the "Chinese Districts" of West Kalimantan, Indonesia* (SEAP Publications, 2003), xxxiv.

³⁹ G.F.H. Rengers Hora Siccama, *Berichtingen Omtrent Natuurbescherming over 1936-1938* (Amsterdam: Centrale Boekerij Kon.Inst v.d. Tropen, 1936), pp. 138–39; 3 *Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia*, p. 369.

approximately 2,000 hectares by a Pontianak self-government decree on 16 April 1937.⁴⁰

Lo Pat Foen Pi

Lo Pat Foen Pi Nature Reserve is located in the Montrado district of Singkawang. Like the Mandor Nature Reserve, it was established in an area of former Chinese gold mining area. The topographical feature that is the main attraction of this reserve is the Pagung lakes, which are former gold mining lakes commonly found in such areas. These lakes are often home to exotic orchids, including the *Vanda Hookerina* species. The reserve was established by a self-government (Zelfbestuur) decree dated 23 March 1936 and approved by the West Kalimantan Resident on 30 March 1936.⁴¹

The Mandor and Lo Pat Foen Pi nature reserves both have great aesthetic value. Visitors can see orchids in their natural habitat at both sites, which are easily accessible. Visitors do not need to venture deep into the Borneo jungle to see native species of orchids. At Lo Pat Foen Pi, visitors can also relax and enjoy the view of the lake, which is surrounded by orchids and Kantung Semar. Since its establishment, the nature reserve has been designed for tourism purposes and is expected to be professionally managed.⁴²

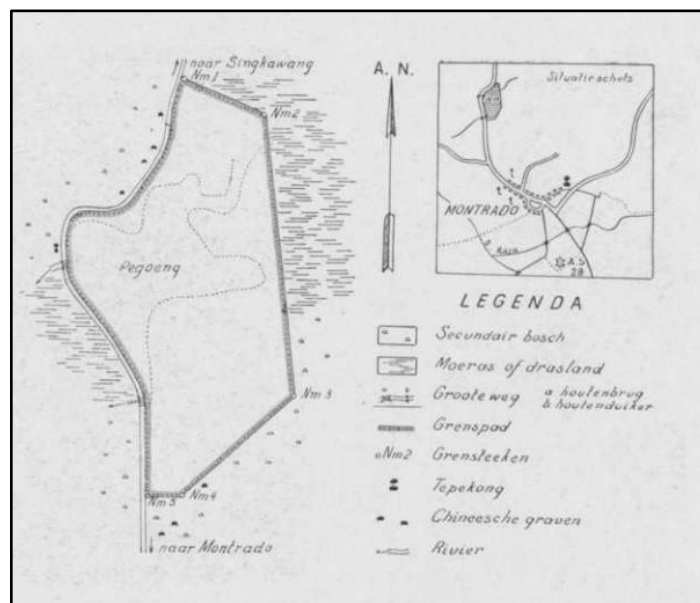


Figure 1. Map of Lo Pat Foen Pi Nature Reserve

Source: De Nederlandch-Indische Vereeniging tot Natuurbescherming, *Album van Natuurmonumenten in Nederlandsch-Indie*, 1937, p. 85.

⁴⁰ 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 369.

⁴¹ G.F.H. Rengers Hora Siccama, pp. 138–39; 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 369.

⁴² G.F.H. Rengers Hora Siccama, pp. 138–39; 3 Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia, p. 369.

The Gunung Palung Wildlife Reserve,

This Wildlife reserve located in southern West Kalimantan, is the only wildlife reserve to have been established in the region during the colonial era. Forester B. De Jong first proposed the establishment of the reserve in 1926, but received no response from the local self-government. Then, in 1929, forester J.P. Schuitmakker urged the establishment of the reserve again. The reserve is a mountainous forest that is home to various Borneo-endemic species such as orangutans, proboscis monkeys (*Bekantan*), siamangs, and rhinos. Its location in the mountains also means that the area functions as a hydrological reservation forest, maintaining the balance of weather and hydrological cycles in the surrounding area. Gunung Palung wildlife reserve was established through a joint decree by the governments of Soekadana, Simpang, and Matan on 22 April 1937, covering an area of 30,000 hectares. However, after the conservation area was established, there was no demarcation line or supervision, as the local self-government did not have the power to enact criminal legislation. The lack of supervisory officers also made it difficult to monitor conservation areas in the hinterland.⁴³

Conclusion

The protection of nature in Dutch Borneo through the establishment of nature reserves and wildlife reserve was a act of activism of global conservation discourse into the colonial imagination of Borneo as a tropical and exotic world. In the context of fauna protection, conservation is indeed based on the idea of extinction. However, when it comes to flora, the rationale behind conservation is not solely ecological, but also aesthetic. All nature reserves in Dutch Borneo were established to preserve orchid habitats. Orchids symbolize Borneo as an exotic tropical world.

Meanwhile, the establishment of conservation areas in Dutch Borneo was largely symbolic rather than practical. This was mainly due to the limitations of Dutch colonial authority in Dutch Borneo. Most conservation sites fall under the jurisdiction of local self-governments. This meant that the designation of conservation areas was merely symbolic, with no monitoring of demarcation lines and no clear penalties for violators, especially poachers. Nevertheless, the conservation sites established during the Dutch colonial era formed an important foundation for the subsequent establishment of conservation areas in Kalimantan Indonesia.

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⁴³ G.F.H. Rengers Hora Siccama, pp. 168–69; 3 *Jaren Indische Natuur Leven: Opstellen over Landschappen, Dieren En Planten Tevens Elfde Verslag (1936-1938) van de Nederlandsch-Indie Vereeniging Tot Natuurbescherming Gevestigd Te Batavia*, p. 369.

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