Global Animal Dealers in Colonial Indonesia

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Abstract

During the 19th century, the increasing number of circuses, zoological gardens, and pet stores across the globe catalysed the global commerce of live animals. The latter part of the 1800s saw animal dealers from Europe and the United States establish a presence in the wildlife trade of Southeast Asia. This contribution explores the history of global animal dealers in colonial Indonesia from the latter part of the 1800s to the initial half of the 1900s. Primary sources rely mostly on colonial newspapers and memoirs. Charles Mayer, Frank Buck, Albert Meems, P.G.J Riemens, and Karl Kreth were some international animal dealers operating in the Archipelago. During the expansion of zoological gardens worldwide and the emergence of the global movement to protect wildlife by using colonial infrastructures and networks in the Netherlands Indies, these international animal dealers engaged in the hunting, exporting, and exchanging of animals for pleasure and scientific study.

The Flourishing of Zoological Gardens and the Dynamics of Wildlife Trade

The popularity and number of zoological gardens grew significantly in Europe and the United States during the 19th century. The inception of the modern version of zoological gardens took place in Europe, with London pioneering the concept in 1828, succeeded by Amsterdam in 1838 and Berlin in 1844.¹ However, the model of such institutions extended to colonial territories as well, particularly across Asia, Africa, and Australia, gaining prominence during the latter half of the 19th century.

For centuries, the establishment and maintenance of wildlife collections have represented an enduring and integral aspect of human societies, particularly for the upper echelons of social strata.² For many people today, zoological gardens are their first and most extensive encounter with wildlife. Seeing wild creatures up close provides comfort, pleasure, and sanctuary, which has significant spiritual value. These intangible values can help people to foster a positive sense of belonging to all life.³ In this light, zoos offer a more easily accessible substitute for the observation of free roaming animals in their natural habitats. Consequently, zoological gardens must capture wild animals.

In the late 19th century, European and U.S. merchants began to gain a foothold in Southeast Asia's wildlife trade. During that era, several central markets had already been established as hubs for the commerce involving wild animals in Asia, with particular prominence attributed to the markets located in Calcutta and Singapore.⁴ The trade in wildlife within the region of insular Southeast Asia has a history predating the era of colonisation. During the early period of Southeast Asia, a variety of valuable commodities including spices, prized wood types, items derived from forests, animal-based products, as well as rare birds were transported from the archipelago for trade purposes.⁵ These trade routes extended through the Sulu Sea, reaching destinations in the northern regions such as China and Thailand, while also stretching along the central Vietnam coastline, and further westward encompassing Java and Melaka.⁶

Several professions were linked with the wildlife trade, including animal dealers, hunters, keepers, and veterinarians. For the existence of zoological gardens, animal dealers were inevitable.⁷ An animal dealer is an individual who receives compensation for either the transportation or distribution of an animal, be it dead or alive. This person is also involved in the procurement, vending, or facilitation of transactions related to living or deceased animals,

which may be intended for purposes such as research, education, display, or biological supply.⁸ Taking this definition into account, Carl Hagenbeck (1844–1913) was arguably the first well-known animal dealer operating in colonial Indonesia. He was based in Hamburg, Germany, and supplied animals to almost every significant zoo, circus, and individual collector worldwide.

At the time of the rise of the wildlife trade, contemporaries witnessed the disappearance of several species such as the quagga and the blue antelope in Southern Africa, as well as the great auk in the North Atlantic. Concurrently, the North American bison and the passenger pigeon were perilously close to vanishing.⁹ This trend engendered widespread apprehension within global scientific circles, with concerns over the imminent decline of additional species. The efforts of wildlife conservation emerged as a worldwide phenomenon, originating at the onset of the 20th century. Propelled by European and U.S. policies, this movement aimed to safeguard all aspects of natural life, encompassing both flora and fauna, against avoidable devastation largely attributable to human mismanagement of the environment.¹⁰

The natural protection movement started from Africa and then gained momentum to preserve natural habitats and wilderness in the colonised regions. The Netherlands faced the pressure of demonstrating their commitment of being a "responsible" coloniser by adhering to global standards in their colony.¹¹ This led to some wildlife regulations being introduced in the Dutch East Indies in the early 20th century. The Dutch colonial administration claimed that the exacerbation of environmental degradation was due to the actions of the native population.¹² The Dutch colonial administration claimed that the exacerbation of environmental degradation was due to the actions of the native population – a claim massively unfounded seeing that, in fact, *European* hunting activity in the Dutch East Indies appeared to have escalated significantly after 1870, and was thus a prominent force in the wild-life endangerment.¹³ Nonetheless, the assertion of attributing environmental deterioration to non-European entities was not uncommon, and was a phenomenon that, for instance, also occurred in British Singapore.¹⁴

The central argument of this contribution is that despite the initiatives undertaken by the natural protection movement in colonial Indonesia, animal dealers maintained their practice of acquiring wildlife creatures for global zoological establishments. The temporal framework encompasses the late 19th century through the early 20th century, particularly the 1920s and 1930s. These two decades are widely regarded as the pinnacle of the global wildlife trade. On a global scale, the proliferation of zoos and circuses during this

era paralleled the significant demand for living species, marking the zenith of the international animal trade.¹⁵ The trade of orang-utans, for example, advanced significantly during this period, manifesting in a notable expansion that was seen by the presence of mature orang-utan specimens in nearly every European zoo. This marked a departure from the situation of a few years prior, wherein the presence of such adult orang-utan specimens in Europe was sporadic.¹⁶ By utilising colonial infrastructure and networks in the Dutch East Indies, international animal dealers engaged in hunting, exporting, and exchanging animals, which they did for profit, even if the animals were meant for pleasure and scientific studies.

The tropical regions are widely known for their extraordinary biodiversity and as the origin of many endemic animal species. The majority of regions encompassing the equatorial belt were under European colonial rule, creating opportunities for global animal dealers to access these territories, often in collaboration with indigenous hunters. Consequently, some actors of the global animal trading business were also active in Indonesia, including: Charles Mayer (1862-1927), a well-known author from the United States; Frank Buck (1884-1950), a wilderness filmmaker also from the United States; Albert Meems (1888–1957), who worked with the van Dijk firm in Tilburg, the Netherlands, and the Ruhe company in Alfeld, Germany; P.G.J. Riemens, who represented Gebroeder Blazer in Rotterdam; and Karl Kreth, who was a representative of the Ruhe company. According to the late Peter Boomgaard, Buck, Hagenbeck, and Mayer were pioneering animal dealers who spent one to two decades within a specific region. They purchased animals from specialised local markets, organised their own hunting expeditions, and established networks with indigenous communities to capture animals for them. Their focus was on live animals, the capture of which required adjusted hunting techniques that resulted in local environmental consequences such as the diminishing of the species population.¹⁷ Besides the above-mentioned prominent figures, other noteworthy animal dealers were based in the Dutch East Indies and had a global reach, too, including A.C. van der Valk and J.F. van Geuns of the firm van Geuns & Valk.

Wildlife stands as a valuable resource within the global ecosystem. For example, carnivores and large mammals hold a crucial responsibility in maintaining the well-being and functionality of ecosystems. Ironically, these are the very species that have been most susceptible to eradication as a result of historical human actions.¹⁸ This susceptibility becomes strikingly apparent when examining the turn of the 20th century, a period marked by species endangerment due to insufficient conservation practices.¹⁹ Thoroughly examining that period, historian Matthew Minarchek argues that the wildlife trade in northern Sumatra underwent a rapid and substantial expansion, parallel to the growth of plantations in the area. His paper moreover reveals that colonial actors served as the principal initiators of this growing trade, orchestrating the procurement, sale, and transport of non-human species from the island to institutions such as zoos, research establishments, and private owners in Europe and North America. Paradoxically, instead of acknowledging the pivotal role played by these colonial actors in the wildlife trade, Dutch authorities attributed responsibility to local hunters and indigenous communities who engaged with the system by capturing animals for the European and American dealers.²⁰

While there are several studies about the history of human-animal relations in colonial Indonesia,²¹ little attention has been given to animal dealers specifically. Another work of Matthew Minarchek provides an insightful historical analysis of the underlying causes of the orang-utan crisis in Indonesia, shedding light on the intricate interplay of economic, social, and political forces that have led to the decline of this species. He states that during the early 1900s, the northern region of Sumatra had emerged as a significant hub within the global wildlife trade. Thus, several renowned animal dealers, including German suppliers of Hagenbeck and Ruhe as well as of the U.S. animal dealers Frank Buck and Charler Mayer, visited Sumatra's east coast in search of endemic fauna. Minarchek primarily discusses van Geuns, an animal dealer closely tied to the Ruhe company, and illustrates his involvement in the transnational origins of Indonesia's orang-utan crisis, as well as the brutal capture and harrowing export of orang-utans.²²

Similarly, Roland Braddell and Fiona Tan discuss how both local and global animal dealers shaped the wildlife trade in colonial Singapore. Braddell's account states that the inception of the animal trade in Singapore can be attributed to Haji Marip, a Malay figure who set the wheels in motion in 1880.²³ However, Tan proposes that Singapore had served as a bustling hub for wildlife commerce even prior to that period.²⁴ Many other people, particularly Chinese dealers, followed suit. The most prominent animal dealers were Herbert de Souza, whose collection was exhibited along the East Coast Road, and W. L. S. Basapa, notable for being the owner of the Singapore Zoo located in Ponggol. Although European and North American animal dealers also engaged in the business in the late 19th century, local animal traders continued

to hold significant importance. Interestingly, historical records show that in British Singapore, a mutually beneficial association often existed between foreign and domestic animal dealers.²⁵

This contribution sheds light on the little studied operations of global animal traders in colonial Indonesia by looking mainly at newspapers published in the Dutch East Indies and the Netherlands during the early 20th century.²⁶ In addition, memoirs authored by the animal dealers Charles Mayer²⁷ and A.C. van der Valk have been consulted.²⁸ Another important source was written by Paul Eipper,²⁹ a German romancier who encountered orang-utans in Alfeld, where they had been imported to Germany from Sumatra by the Ruhe company. Regrettably, no indigenous records about the trafficking of wildlife by animal dealers in the Dutch East Indies could be found so far, nor were any official documents regarding wildlife business by the colonial authorities. Following Fiona Tan's assessment of wildlife trade in British Singapore,³⁰ this might be due to the fact that the colonial government considered the international trade of living animals as an inappropriate practice, and therefore did not prioritise its documentation during the Dutch colonisation period.

From Pleasure Hunting to Generating Large Income

According to Alfred Russel Wallace's *The Malay Archipelago*,³¹ Sumatra is, from a zoological perspective, more closely connected to Borneo than Java. The rich volcanic soil in northern Sumatra became the most productive plantation area in the archipelago between the middle of the 19th century and the Second World War, with tobacco, rubber, tea, and palm oil being the primary commodities, causing new modern transport options to expand in the surrounding area.³² The conversion of tropical forests into plantations drastically changed the landscape, and at the same time created new habitats for both human and non-human creatures. The main influx of European settlers occurred in the 1870s and 1880s. The primary motivation for their migration was economic gain, with many intending to return to their home countries after accumulating wealth. Notably, the majority were employed as estate managers and supervisors rather than operating as independent planters.³³

In addition to snakes, binturongs, siamangs, monkeys, and several other smaller animals, Sumatra is home to well-known larger animal species such

as orang-utans, elephants, tigers, and rhinoceroses. Orang-utans are mainly sighted in northern Sumatra, while elephants, tigers and rhinoceroses are more widely distributed on the island. The first Sumatran rhinoceros was imported to Europe in 1872 by the Hagenbeck dealership.³⁴ In 1912, Karl Kreth of the Ruhe company transported a diverse collection of animals from Sumatra to Singapore, from where they were distributed on a global market. The collection included five elephants, five tigers, six tapirs, one clouded leopard, five black monkeys, five sultan fowls, a specimen of the exceedingly rare "fishing alligator", and five armadillos.³⁵

The Ruhe company also facilitated the transfer of two wild elephants, who they named "Kechil" and "Hitam", to the Smithsonian National Zoological Park in the United States by December 1918. These young pachyderms had been captured in Sumatra in 1915 and 1916, yet details concerning their transportation from Sumatra to North America during the tumultuous First World War period remained unknown. Recent record, however, illuminates that Kechil and Hitam were procured by the National Zoological Park in Washington DC from the Ruhe company in 1918.³⁶ Established in 1860, the German company L. Ruhe had its origins in animal trading and, by 1869, established an American branch in New York City.³⁷ Presumably, these two elephants underwent a two-year hiatus in Sumatra before embarking on their journey to the United States due to wartime disruptions. The global impact of the First World War was strongly felt in shipping operations, extending to the Dutch East Indies. Export logistics, particularly those connected to German businesses within the archipelago, experienced substantial turmoil during this period.³⁸

On an occasion in Vlissingen, the Netherlands, E. Roodhuijzen, a former overseer of a tobacco plantation in Deli, northern Sumatra, reflected upon the existence of a planter within the dense jungles of Sumatra. He highlighted the routine and arduous nature of this life, which was punctuated by a profound monotony. The narrative underscored that the sole factor lending intrigue to this challenging lifestyle lay in the exhilarating interactions with the wildlife.³⁹ As a result, a substantial number of planters in the Deli area and its vicinities began to engage in hunting pursuits, perceiving it not only as a recreational activity driven by the allure of thrilling wildlife encounters, but also as a mechanism for asserting their societal status. Animal dealer Abraham Cornelie van der Valk purported that he was born in Sumatra and received his education in the Netherlands, only to return to Sumatra to work on a tobacco plantation. Besides his plantation job, he enjoyed hunting wildlife. He was fluent in English, French and German and, more importantly, six Sumatran dialects.⁴⁰ In the mid-1920s, he had started the wildlife business with a partner, most likely van Geuns, and set up a basecamp in Langsa, Aceh. Langsa was a prominent commercial spot that witnessed significant growth during the early 20th century, primarily attributed to the rapid expansion of European plantations, notably those cultivating rubber. The burgeoning economy of Langsa was markedly bolstered by the strategic establishment of the Aceh Tram line traversing the city.

When European and U.S. agents entered the wildlife trade, they mostly collaborated with the natives. Van der Valk employed 200 local assistants in his quest to hunt for wild animals. Among the numerous local aides, van der Valk identified several individuals as close associates, such as Guyurseng, Jalip, and Ludin. Their responsibilities encompassed a range of tasks, including accompanying van der Valk on hunting ventures, procuring animals from indigenous hunters, overseeing the transportation of animals, and attending to their care. Besides collaborating with the local populace, van der Valk also engaged with the Chinese community, primarily for the purpose of supplying feed for the animals and constructing cages.⁴¹

In only three years, between 1925 to 1928, van der Valk captured 200 orangutans, 29 elephants, and 40 tigers. According to him, he caught most of the animals himself and only purchased a few wild animals from locals, earning him the poetic moniker of "tuan Binatang", which can be translated as "lord of the beasts".42 His partner, van Geuns, who was his assistant in earlier times, had arrived in the Dutch East Indies as a rubber planter, and became involved in animal hunting in his spare time. Van Geuns' inclination towards the pursuit of live animal capture emerged following one of his visits to the Netherlands, during which he shared a photo compilation of trophy images with his acquaintances. In response, his friends posed a question regarding his omission of live animal capture, thereby sparking his interest in this endeavour. Later, the Artis Zoo of Amsterdam tasked him to hunt for wild animals and gave him the money to get started.⁴³ Apparently, upfront payment was imperative to initiate involvement in the animal trade, a requirement stemming from the essential financial provisions mandated for funding hunting expeditions and facilitating the subsequent transportation logistics. Van Geuns then worked for prominent European animal dealers such as C. A. Périn in Amsterdam and the Ruhe company.44

Foreign animal traders relied on local employees to acquire local hunting expertise, thereby enabling them to capitalise on this newfound knowledge for economic gain. This scenario diverged from the typical colonial practice characterised by a heavy reliance on European knowledge and proficiency.⁴⁵

The intricate network of animal trade during the colonial era in Indonesia showcased a remarkable dissemination of indigenous knowledge that proved pivotal in effectively managing the lucrative wildlife commerce. Most Dutch in Indonesia were neither the hunters they were back home nor the enthusiastic hunters that the British were in India - possibly because even the most elite classes of the Dutch in the Indies lacked the aristocratic tradition usually connected with hunting activity.⁴⁶ Van der Valk observed the hunting methods of the Gayo, Batak, and Malay people, who frequently accompanied him on hunting expeditions.⁴⁷ Charles Mayer travelled to Southern Sumatra, too, in order to acquaint himself with the local culture, language, and animal trapping techniques. He aimed to source live animals directly from the field, and to subsequently sell them with more profit. To do so, he acquired authorization from the Dutch consul general in Singapore and spent eighteen months in the field in Sumatra.⁴⁸ These phenomena mirror the historical reliance of European colonisers on native knowledge for navigating wilderness environments, particularly in the realm of hunting, as exemplified by the historical precedence of the Canadian fur trade.49

Despite being a U.S. citizen, Mayer transported relatively few animals to the United States due to the high import tax of 25% imposed on landed animals.⁵⁰ Mayer's strategic choice to primarily target the Australian market for the sale of captured animals was also driven by a desire to mitigate transportation risks due to shorter travel distances. Long journeys posed significant dangers and hardships on the animals, resulting in numerous animal fatalities en route. This adversity undermined the profitability of the venture, despite occasional successful deliveries. Mayer emerged as a crucial intermediary for Australian zoological gardens, which had established public zoos in Melbourne, Adelaide, and Sydney during the late 19th century. Beyond the Australian market, Mayer's influence extended to international realms as he supplied animals to Hagenbeck and William Cross, a Liverpool-based animal dealership, and the Antwerp Zoological Garden. Nonetheless, some of Mayer's animals did make their way to the U.S. through Hagenbeck.⁵¹ This shows that the animal trade was not necessarily bound to national affiliation, but rather to opportunities and transnational connections.

Sumatra was not only a place for hunting and trapping wild animals, but also for filming wildlife movies. Global animal trade found itself intricately interwoven with various entertainment sectors, extending beyond just zoological gardens. This complex interplay between the trade and entertainment industries reflects the animal trade's impact on leisure and amusement. U.S. animal dealer Frank Buck filmed the fight between wild animals in Sumatran jungles to gain success for his live-action-adventure films. His movies tapped into the fascination of a supposedly wild and ferocious nature. In 1932, *Bring 'Em Back Alive*, which was based on Buck's book that he had published earlier, was one of the most successful films in the United States that year, grossing over one million U.S. dollars.⁵² It was followed by Buck's 1933 film *Wild Cargo*, in which orang-utans figured prominently.

Shipping Animals on a Global Scale

In 1926, van Geuns brought an orang-utan to Alfled, the German headquarter of the Ruhe company. While there is no detailed personal account on van Geuns' voyage from Aceh to Europe, it is highly plausible that he took a similar route as that of van der Valk's.⁵³ In Alfeld, negotiations began to sell the orang-utan onwards. While the orang-utan was initially offered to Moscow, he was eventually sent to the Dresden Zoo, and sold for 20,000 German Reichsmark.⁵⁴ Gustav Brandes, the director of the Dresden Zoo, named him "Goliath". Goliath's presence in Dresden triggered a series of long-term behavioural studies of the species, which are still considered classic accounts even today.⁵⁵

In the following year, van Geuns returned to Amsterdam with the largest group of orang-utans to reach Europe alive. Overall, 25 specimens arrived in the Netherlands, including six adult pairs, each with a young one. Upon arrival, the group was taken to the Palm House at Amsterdam Zoo to acclimatise. News of their safe arrival reached the Ruhe company, and their transport was arranged. The animals reached Alfeld at the end of April. Ruhe offered the pairs for 25,000 Reichsmark to interested European zoo directors, who each took as many as their budget allowed.⁵⁶ Primates were a sought-after species at the time. Van Geuns reportedly lost only one animal on the passage from Sumatra to the Netherlands.⁵⁷ One offspring was even born onboard and later sold, together with the mother, Suma, to the Dresden Zoo where Brandes named the baby "Buschi".⁵⁸

The shipment of animals from colonial Indonesia to Europe was made possible by several technological advancements, including steamships, railroads, and the telegraph. These numerous external occurrences made it feasible for animal dealers to dispatch animals to international markets, which was previously more difficult. It was not until the opening of the Suez Canal in 1869 that steamships were extensively used in trade in the Dutch East Indies. These developments were of crucial importance in determining how animals should be transported to Europe. The duration of the voyage, originally spanning three to four months, was significantly abbreviated to just thirty to forty days.⁵⁹ This truncation served the purpose of minimising the likelihood of animal fatalities, a risk that was markedly amplified during the prolonged journey. The reduction in travel time underscores a pragmatic approach aimed at safeguarding the well-being of the transported animals, which aligns with the overarching objective of ensuring their successful arrival and subsequent transactions. In the meantime, the original telegraph lines in the Dutch East Indies were utilised primarily to administrate the islands more swiftly and efficiently.⁶⁰ The telegraph was employed by the animal dealers to communicate with their buyers abroad.

With the rapid growth of plantation enterprises in North Sumatra towards the end of the 19th century, the railway network was constructed to facilitate transportation. Similarly, the expansion of Belawan as a port for shipping plantation products to Europe has spurred the development of the northern Sumatra train network linking plantation sites. The main goal was to market tobacco more quickly and more cheaply. In the early 20th century, the relations between technology and state-building were more evident than ever.⁶¹ The Dutch colonial government built the first parts of a steam tram in Aceh to transport military logistics during the Aceh War and help the colonisers solidify power in Aceh, which took more than thirty years. After the Dutch Aceh War ended, the Aceh Tram was utilised mainly to transport passengers, cargo, and wildlife within the plantation belt.⁶²

The benefit of the advanced technology for animal dealers is written in the memoirs of A. C. van der Valk.⁶³ Van der Valk wrote that he organised the animal delivery of orang-utans, tigers, an elephant and other smaller animals and birds after getting confirmation from the authorities that no rabies had been detected in the previous three months, since animal dealers would not acquire shipping licences without this paper. Once he secured the health certificates, van der Valk asked to rent four wagons from Aceh Tram that were dispatched from his headquarters in Langsa. The cargo was transferred to the larger Deli-Rail train at the Aceh tram terminus in Besitang and promptly proceeded to Medan. Van der Valk and his indigenous assistant Jalip consistently provided food and hydration to the animals.

A minimum of 10,000 bananas was necessary to provide sustenance for the animals en route to London, and in addition to the meat for the tigers, they carried rice, flour, corn, eggs, peanuts and sugarcane. After arriving at the seaport of Belawan, the carts were transported to the quay where the Rotterdam Lloyd's vessel *Garut* was moored. The rear section of the vessel was designated to deliver animals. Van der Valk adhered to a specific timeframe allocated for the loading of his cargo, with the stern section of the ship designated for his use. Notably, a spacious hut originally intended as a hospital remained unused throughout the voyage and instead provided additional cover. The aft deck presented a scene of disorder, characterised by an assortment of boxes, crates, food supplies, and logistical arrangements. Each day, following sunset, tarpaulins were utilised to shield the lofts.

The onwards journey took the party through the Indian Ocean, the Red Sea and the Mediterranean Sea, by passing through the Suez Canal. From Port Said in Egypt, van der Valk sent a telegram to the animal dealer Bruce Chapman in London. Chapman expected Van der Valk and his cargo when they arrived in Rotterdam. He came to the Netherlands to observe the animals and expressed appreciation towards Van der Valk for ensuring the secure transportation of the wildlife. Together with the animals, both Chapman and van der Valk embarked on a vessel belonging to the Batavier Line commencing their journey towards London.

Animals were especially vulnerable during the ocean excursions. Thus, the transportation and maintenance of living animals during the trip posed significant difficulties and financial burdens, particularly in the case of orangutans. The reason for their short survival in captivity stemmed from their vulnerability and sensitivity to climate alterations. A caged orang-utan rapidly lost its spirit and frequently refused all meals. On one occasion, Charles Mayer sent eighteen little and medium-sized orang-utans to San Francisco in hopes of landing two or three alive, but they all perished en route. If he had succeeded in delivering a live specimen, he could have sold it for 5,000 U.S. dollars.⁶⁴ As this incidence shows, even though it was in the interest of animal dealers to keep the captured animals alive, they often struggled to do so.

Wildlife Protection in Colonial Indonesia

The depletion of natural resources, mostly mammals and bird species, was a grave concern globally at the turn of the 20th century. This situation was attributed to the expansion of human cultural areas, the excessive hunting of animals for sport or financial gain, and the capture and killing of rare animal species for display in zoos, circuses, and museums.⁶⁵ In various regions of the world, particularly in Africa and Asia, cultural areas subjected to colonisation or uncontrolled hunting practices witnessed a steady decline in their rare and distinctive animal life. During the early 20th century, there were resurgences in nature conservation efforts as individuals (mostly scholars and scientists) began to recognise the significant impact of human activities on the demise and destruction of the environment leading to a concerning decline in animal species. It was estimated that many animal species were at risk of extinction and could only survive for a limited time without prompt and effective government intervention.⁶⁶

The first regulation to safeguard wild animals in the Dutch East Indies was the 1909 ordinance, Official Gazette No. 497 and 594, which compiled an exhaustive list of all animal species that, according to the stakeholders, warranted legal protection.⁶⁷ Thus, except for a few species specified by the governor-general, all wild mammals and birds in the Dutch East Indies were covered by these rules. However, according to K. W. Dammerman (the Chairman of the Netherlands Indies Society for the Protection of Nature), the outcome of the legislation proved to be highly dissatisfactory. Given the vast extent of the archipelago, the existing police force was grossly inadequate in its capacity to manage the widespread slaughter of animals. A primary adversary to the preservation of wildlife was represented by the traders specialising in skins, feathers, and various other animal-derived commodities. These traders operated ubiquitously, with the animal dealers spread throughout the region. Apparently, even after the enactment of the prevailing regulation in 1909, the export of hundreds of thousands of mammal and bird skins persisted annually from the Dutch East Indies.⁶⁸ Therefore, the need for a revision of existing regulations became pressing, not least due to the near unrestricted hunting of the species that had been excluded from protection, and the continued threat to many of the protected species.⁶⁹

In 1924, a new ordinance was implemented using an approach that differed from the regulation in 1909 as indicated in Official Gazette No. 234.⁷⁰ The revised ordinance introduced a paradigm shift by mandating the specific listing of protected species. The new regulation additionally instituted that licenses would be necessary for hunting. Thus, solely those who received a valid license and had remitted the required fee – the costs of which spanned from ten to two hundred guilders – were authorised to hunt. This progressive framework, however, exclusively took effect within Java and Madura, with its extension to other islands deemed imprudent, thereby upholding the unsat-isfactory 1909 regulations.⁷¹

Chief among the criticisms directed at the new ordinance was the inhumane treatment of man-like apes, particularly orang-utans and gibbons, often subjected to needless experimentation. The burgeoning demand for orang-utans for zoological gardens and transplant experiments spurred the urgency for hunting restrictions.⁷² Concurrently, precautions were deemed essential to counter the fervour of museums avidly amassing specimens of rare creatures. Consequently, a separate ordinance in 1925 specifically exempted the orang-utan from the category of other monkeys unaffected by the provisions against capture and killing. Despite this measure, exports of orang-utans persisted. Animal dealers managed to still transport the animals abroad. Meanwhile, a parallel trajectory unfolded for the Javanese rhino (*Rhinoceros sondaicus*), whose numbers plummeted, estimating only a few dozen individuals, while its Sumatran counterpart (*Rhinoceros sumatrensis*) also faced steep decline. Besieged by big-game hunting, indigenous populations additionally targeted these creatures for their prized horns.⁷³

During the late 1920s, the animal trade to European countries and commercialisation of endangered fauna, including orang-utans, gibbons, tapirs, and rhinoceroses, resulted in a significant public outcry. In the Dutch East Indies, some newspapers made explicit accusations against animal dealers and professional hunters, labelling them as agents of environmental destruction.⁷⁴ Van der Valk and van Geuns faced condemnation for sending great quantities of orang-utans to Europe during the second half of the 1920s. The arrival of orang-utans at the London Zoo was met with opposition from Sir Heskett Bell (1864–1952), a former British colonial official. Bell disapproved of the capture techniques and, in his view, reckless export of the endangered species.

Bell was a seasoned civil servant with extensive experience in Africa. He had assumed governance roles across diverse regions in the British colonies on the continent and was thus well-acquainted with wildlife regulations. Following his 1924 retirement, Bell embarked on journeys, notably a visit to Dutch East Indies in 1925 and 1926 to learn Dutch colonial governance techniques, culminating in a published work. His engagement with and comprehension

of Dutch colonial administrations seemingly informed his impassioned support for orang-utan safeguarding and his evident enthusiasm for the Dutch East Indies' wildlife policies and conservation.⁷⁵

The London Zoo also sought clarification from van der Valk regarding the method employed in the animal's capture, ostensibly with the intention of safeguarding their reputation.⁷⁶ A Rotterdam newspaper published an article questioning why the Minister of Colonies in The Hague was not acting to forbid the hunt and the trade in their colony in Asia. There was a growing public concern about the uncontrolled export of endangered creatures and fear of their extinction. Moreover, the article emphasised the need to cease large-scale animal theft without further delay.⁷⁷ Since the late 1800s the media emerged as a platform for advocating animal welfare in the United States, a practice that eventually gained global attraction.⁷⁸

Some natural scientists in the Dutch East Indies believed that the efficacy of the legislation prohibiting the possession of endangered species under the ordinance of 1924 would only be rendered adequate through a ban on the export of such species. Issues on the decline in wildlife population had been reported in newspapers across both the colony and in the Netherlands.⁷⁹ Subsequently, the colonial government tackled the matter of wildlife exploitation in the Dutch East Indies through the implementation of *The Game Protection Regulation and Hunting Ordinance*, as documented in Official Gazette No. 134 and 266 of 1931. These regulations made it illegal to export any protected species, whether dead or alive, along with their fur, feathers, and ivory.⁸⁰

However, in contrast to nature regulations that provided complete protection, the regulations of 1931 still permitted small- to medium-scale exploitation of wildlife. The Ruhe employee Karl Kreth, for instance, was granted permission to capture, possess, and export a restricted number of animals. The approved animals included a juvenile Sumatra elephant, an orang-utan, a pair of tapirs, three crocodiles, five iguanas, five squirrels, and five cockatoos of each species, including the Komodo, all of which were meant to be delivered to the Berlin Zoo.⁸¹

Moreover, according to one report, Frank Buck obtained export licenses from the Department of Government Businesses in 1935, aiming to procure several orang-utans for the St. Louis Zoo in the U.S. This was financially rewarding as some U.S. zoos were willing to pay high prices for rare animals.⁸² An article (Fig. 1) stated that a juvenile rhinoceros could cost 18,000 guilders, excluding transport costs, and that an elephant cost the same amount. A family of orang-utans would be worth 15,000 guilders.⁸³

DIEREN TE KOOP!

Duitsch dierenpark de leverancier.

Weet u voor hoeveel je een Afrikaansche olifant kunt koopen ? En een jonge neushoorn? Of een heele orangoetan-familie ? Het is een kleinigheidje om het even te zeggen. Een jonge neushoorn kost 18 000 gulden, ongerekend de transportkosten in Europa, een olifant, indien het een mooi exemplaar met groote ooren is, eveneens. De orangoetanfamilie zal voor f 15.000 kunnen worden geleverd en wie er dan nog een giraffe of een nijlpaard bij wil hebben, zal er nog f 7200 aan toe moeten voegen ?

In het dorpje Alfeld, gelegen tusschen Hannover en Göttingen, is de firma L. Ruhe gevestigd. De firma Ruhe handelt in wilde dieren. Zij beschikt daar over een ontzaglijk dierenpark, dat verscheidene Europeesche dierentuinen in den schaduw stelt, en dat onder die sterve-lingen, die iets te maken hebben met dieren, zij het dan dierentuin-of circusdirecteuren zijn, een zeer goede naam bezit. Men kan het zoo gek niet bedenken, of de fa. Ruhe kan het leveren. Men doet een bestelling en prompt wordt afgeleverd wat er besteld is. Slechts in enkele gevallen moet het dier aangevoerd worden, en dan is dat alleen voor zeer bijzondere exemplaren. Wanneer het om betrekkelijk gewone dieren gaat, zooals deze in circussen worden gevonden, zijn ze "uit voorraad leverbaar".

Figure 1 | An article related to the Ruhe animal dealership published in Dutch East Indies. Common Source from: Algemeen handelsblad voor Nederlandsch-Indië, 26 February 1932, p. 9. Retrieved from: https://resolver.kb.nl/resolve?urn=MMKB19:000462107:mpeg21:p00009

After implementing wildlife legislation in 1931, several foreign animal dealers persisted in getting specific protected animals, including orang-utans, from colonial Indonesia and transporting them to various global destinations. This was made possible by their prior relationships with government officials, which allowed them to circumvent legal restrictions.⁸⁴ In light of the attributes of colonialism, it was a commonly observed phenomenon that animal dealers found themselves beneficiaries of support and aid from their European counterparts acting in their capacity as local colonial authorities.

Animal Exchange: A Loophole in Wildlife Regulations

Acquisition of animals for zoos' collections occurred through purchases from animal dealers and exchanges with other zoos, with animal dealers playing a considerable role in these exchanges. Occasionally, animals from the colonies were sent to European zoos. Not only were animals from colonised regions introduced into European and North American zoological gardens, but colonial species were also added to zoological gardens that were established in the colonies in addition to European species that had been introduced, too.⁸⁵

The Dutch East Indies also boosted zoos as tourist destinations. The first zoo in the region was established in Batavia in 1864 as part of an amusement complex built on land donated by the renowned Javanese artist Raden Saleh. Later, the Dutch upper class in Batavia developed the zoo with private funding from the Society for Plants and Animals. The amusement park as well as the zoo were popular because they were accessible to all city residents, not only Europeans but also non-Europeans, which was rare for the era.⁸⁶ Following Batavia, more zoological gardens were established in Surabaya, Bandung, Fort de Kock and Deli in the early 20th century.

The animal exchange was a particular way to obtain animals from the Dutch East Indies after the 1931 wildlife regulation. In Singapore, for instance, the British colonial administration banned capturing and selling live animals and birds in the Malay States in 1934. However, animal dealers found ways to continue trading by creating a system of animal exchange. One such dealer was William L. S. Basapa (1893–1943), also a proprietor of a private zoo in British Singapore, who sent a shipment of twelve elephants, twelve tigers, twenty black panthers, and over twenty pythons to Europe, America, Australia, and India in 1935. In exchange, he received three sea lions, two mountain lions, and two elks from California the following year.⁸⁷ The animal exchange system allowed dealers to continue trading and transporting live animals without contravening the new regulations.

At the end of 1935, the management of the Batavia Zoo, led by F. Bonte, forged partnerships with both zoological gardens abroad and animal dealers, resulting in an influx of animals brought from overseas. Bonte was able to exchange orang-utans for Chapman zebras, a deal he made with the zoo in Hanover run by the Ruhe company at that time. Numerous animals were

delivered to the Batavia Zoo in the following years. Bonte received lions, Russian bears, several smaller animals, and numerous birds, including ibises, swans, and cranes.⁸⁸

In the first half of 1937, stakeholders of three dominant European animal dealerships visited Batavia to secure an agreement with Batavia Zoo. These were van Dijk & Zonen from Tilburg, Ruhe from Alfeld and the Gebroeder Blazer from Rotterdam. The Batavia Zoo was also supposed to receive two polar bears from Gebroeder Blazer, and it was assured that they could withstand the heat in the tropical islands since they were born in captivity and not in the Arctic. However, no further information related to the existence of polar bears in the Batavia Zoo. Nonetheless, Riemens of Gebroeder Blazer brought a variety of animals, including birds of paradise, Java monkeys, Malayan bears, orang-utans, and gibbons, giant snakes, two juvenile elephants, and various avian species, that they transported back to the Netherlands on the ship Palembang.⁸⁹ Some of the shipment had previously been vended in London, while the remaining creatures found lodging in the recently established animal facility in Overschie, a district located in the northern part of Rotterdam. This facility boasted specialised compartments for primates, enclosures for predatory species, and a collection of 65 aviaries. The pair of elephants were destined for a transient sojourn at the Hague Zoo, where they could convalesce following their arduous voyage. Subsequently, these animals were scheduled for transfer to Russia, having been purchased by the Moscow Zoo.90

Around the same time, Albert Meems, a representative of van Dijk & Zonen, embarked from Batavia aboard the vessel *Tawali*. He took a big shipment of animals with him, some of which he had acquired from exchange arrangements with the Batavia Zoo. His yield was impressive: he brought three orang-utans, five king tigers, two panthers, two chamois buffalo, two gibbons, twenty five Java monkeys, eight hundred birds of diverse plumage, two Malayan bears, tree ducks, and birds of prey, such as the uncommon harrier. In exchange, Meems would bestow the Batavia Zoo with non-Asian animals that they desired for their restocking.⁹¹

In addition to his involvement with van Dijk & Zonen, Albert Meems was also affiliated with the Ruhe company., He was a very influential person in the global animal trade, hunting and procuring animals in various regions in Asia. Born in Drente, Netherlands, in 1878, he became a sailor who, like many seafarers of the time, occasionally brought a monkey, parrot, or other animals with him, which he gave to his mother as a gift or sold at the port. He seized the opportunity to participate in the animal trade when the chance arose to collaborate with Carl Hagenbeck in South America. In 1913, he joined one of Hagenbeck's expeditions as an assistant and accompanied an animal shipment to Hamburg. Eventually, he became an employee of the Ruhe company and kept this position for over forty years. He acted on behalf of Ruhe in various regions, where he facilitated deliveries and fulfilled the role of an intermediary for commercial transactions.⁹²

Also in 1937, Batavia Zoo received hippopotamuses, ostriches, several monkeys, and a few other African species that were transported from Europe on board of the ship *Pulau Laut*. The shipment consisted of a substantial quantity of primarily African animals, with the majority intended for the Batavia Zoo.⁹³ The voyage was described as an "exchange transport" because the British animal dealer in charge of this shipment exchanged the given specimens for animals from the Dutch colony, which would then be transferred to European zoos.⁹⁴ While docking in Belawan, the *Pulau Laut* grabbed the attention of the management of the *Vereeniging Medans Dierenpark* in Deli, or Deli Zoo, due to its unique animal passengers. The British animal dealer and the Deli Zoo agreed to exchange two zebras and a few flamingos which would be arriving in Belawan from Port Said in December 1937 for four monkeys and some other animals from the Deli Zoo.⁹⁵

The transportation of these animals from Port Said raised uncertainties regarding whether they would be directly delivered to Deli or be routed through Europe before reaching their final destination. However, tracing back to 1936, a scenario unfolded when the very same vessel docked at Tanjung Priok in Batavia, carrying a pair of zebras that were earmarked for the Batavia Zoo. The journey these animals undertook was marked by considerable challenges, originating in Africa and routing first through Hamburg and then onward to Batavia.⁹⁶ This sequence of events highlights the significant influence of European animal dealers, who exercised control over vast expanses of African and Asian fauna, and their pivotal role in orchestrating the exchange of animals between the colonial territories in both continents.

The zoos in the Dutch East Indies did not only exchange animals with European zoos, but also with zoos in other parts of the world. In 1935, the vessel *Nieuw-Holland* arrived in Java, carrying a pair of eagles intended for the Surabaya Zoo. As part of the exchange, an orang-utan was brought to the Sydney Zoo. Not only the Surabaya Zoo received animals, the *Nieuw-Holland* also transported a pair of kangaroos from Australia for the Batavia Zoo.⁹⁷

Conclusion

Located on the equator, Indonesia is known for its unique wildlife, which was historically procured for use by royal courts and affluent households around the world. Endemic animals originating from tropical regions have been used commercially since before Western colonisation. Yet the demands for these animals increased significantly during the late 19th and early 20th century, coinciding with the expansion of zoological gardens globally. The anthropologist Arjun Appadurai argues that the existence of ethnographic artefacts housed in Western museums is inextricably linked to multifaceted histories encompassing empire, science, the economic market, and Western public interest.⁹⁸ Concurrently, zoos can be classified as a variation of museums, differing from conventional museums by showcasing live animals for observation rather than watching them in their natural habitats.⁹⁹ The animals sourced from colonial Indonesia that found their place in zoological gardens across the globe in the early 20th century exemplify the interplay between colonialism and economic prospects enabled by the expansive global market to support cultural institutions in the Western society.

Analysing the global wildlife trade in Indonesia at the beginning of the 20th century not only illustrates how wild animals were increasingly commercialised, but also highlights how international animal dealers in the Dutch East Indies were able to operate by relying on colonial power. The wild animal trade was characterised by its volatility, requiring that the animal dealers possessed a broad range of commercial acumen and adeptness in cultivating relationships. European and U.S. animal dealers in colonial Indonesia exploited their privileged status to generate financial gain and prestige, all while indulging their enthusiasm for hunting and the adventurous lifestyle offered by colonial structures. The utilisation of colonial networks and infrastructure facilitated their participation in the global market and enabled them to engage in the distribution of wild animals from colonial Indonesia to the wider world.

In this specific context, animals also assumed a pivotal role, propelling individuals like van der Valk, van Geuns, and Albert Meems to transition into the emergent occupation of animal trading, which extended its influence on a global scale, yet to some extent, contributed to the decline of natural resources in the Dutch colony. This aligns with the premise proposed by Harriet Ritvo, encapsulated in the term "animal turn", which underscores the exploration of new perspectives on the historical and contemporary significance of animals.¹⁰⁰ Historiographically, scholars have documented influential institutions connected to animals, encompassing entities like humane societies and zoological gardens, within which individuals distinguished themselves by their involvement in roles such as breeders, animal dealers, scientists, and other affiliated capacities.

- 1 Rothfels, Nigel (2002): Savages and Beasts. The Birth of the Modern Zoo, Baltimore.
- 2 Cowie, Helen (2018): "Exhibiting Animals. Zoos, Menageries and Circuses", in: Hilda Kean, Philip Howell (Eds): The Routledge Companion to Animal–Human History, Abingdon, p. 298.
- 3 Eaton, Randal L. (1981): "An Overview of Zoo Goals and Exhibition Principles", in: *International Journal for the Study of Animal Problems*, vol. 2, no. 6, p. 295–296.
- 4 Boomgaard, Peter (2001): Frontiers of Fear. Tigers and People in the Malay World, New Haven, p. 140.
- 5 Leur, Jacob Cornelis van (1967): Indonesian Trade and Society: Essays in Asian Social and Economic History, The Hague.
- 6 Hall, Kenneth R (2011): A History of Early Southeast Asia. Maritime Trade and Societal Development, Lanham
- 7 Rothfels (2002), Savages and Beasts, p. 187.
- 8 "Animal dealer Definition", on: https://www.lawinsider.com/dictionary/animal-dealer, accessed 17 November 2022.
- 9 Cribb, Robert (2007): "Conservation in Colonial Indonesia", in: Interventions, vol. 9, no. 1, p. 54.
- 10 Westermann, J. H. (1945): "Wild Life Conservation in the Netherlands Empire, its National and International Aspects", in: Pieter Honig, Frans Verdoorn (Eds): *Science and Scientists in the Netherlands Indies*, New York City, p. 417–424.
- 11 Cribb (2007), Conservation in Colonial Indonesia, p. 49–61. Given its notable strides in preservation efforts, the Netherlands garnered a favourable reputation among the European nations due to its extensive array of valuable natural reserves. In the year 1905, a private endeavour known as the Society for the Preservation of Nature Monuments was established in the country. The primary impetus behind its formation was the safeguarding of the spoonbill, a species with a scarce nesting location in Western Europe. This concerted action solidified the Netherlands' influential stance at the inception of the wildlife preservation movement. See: Westermann (1945), Wild Life Conservation in the Netherlands Empire, p. 417.
- 12 Cribb (2007), Conservation in Colonial Indonesia, p. 49–61.
- 13 Boomgaard, Peter (1997): "Hunting and Trapping in the Indonesian Archipelago, 1500–1950", in: David Henley, Peter Boomgaard, Freek Colombijn (Eds): *Paper Landscapes. Explorations in the Environmental History of Indonesia*, Leiden, p. 185–214.
- 14 Tan, Fiona (2014): "The Beastly Business of Regulating the Wildlife Trade in Colonial Singapore", in: Timothy P. Barnard (Ed.): Nature Contained. Environmental Histories of Singapore, Singapore, p. 154.
- 15 Ibid., p. 175-176.
- 16 De Nieuwe Vorstenlanden, 6 September 1928, p. 2.
- 17 Boomgaard (2001), Frontiers of Fear, p. 141.
- 18 Noss, Reed F (2001): "Introduction. Why Restore Large Mammals?", in: David S. Maehr, Reed F. Noss, Jeffrey L. Larkin (Eds): Large Mamal Restorarion. Ecological and Sociological Challenges in the 21st Century, Washington D.C.
- 19 Dammerman, Karel Willem (1929): Preservation of Wild Life and Nature Reserves in the Netherlands Indies, Weltevreden; Hubback, Theodore R. (1936): Principles of Wild Life Conservation, London.
- 20 Minarchek, Matthew (2020): "Creating Environmental Subjects. Conservation as Counter-insurgency in Aceh, Indonesia, 1925–1940", in: *Political Geography*, vol. 81, p. 1–13.
- 21 Boomgaard (2001), Frontiers of Fear; Cribb, Robert; Gilbert, Helen; Tiffin, Helen (2014): Wild Man from Borneo. A Cultural History of the Orangutan, Hawaii; Cribb, Robert (1998): "Birds of Paradise and Environmental Politics in Colonial Indonesia, 1890–1931", in: David Henley et al (Ed.): Paper Landscapes, p. 379–408; Andaya, Leonard (2017): "Flights of Fancy. The Bird of Paradise and its Cultural Impact", in: Journal of Southeast Asian Studies, vol. 48, no.3, p. 372–389.
- 22 Minarchek, Matthew (2018): "Plantations, Peddlers, and Nature Protection. The Transnational Origins of Indonesia's Orangutan Crisis, 1910–1930", in: *TRaNS: Trans-Regional and -National Studies of Southeast Asia*, vol. 6, no. 1, p. 1–29.
- 23 Braddell, Roland (1982): The lights of Singapore. Kuala Lumpur, Oxford, p. 123.

- 24 Tan, Fiona (2014), The Beastly Business, p. 148.
- 25 Ibid., p. 149.
- 26 These include Deli Courant, Indische Courant, De Sumatra Post, De Locomotief, Algemeen handelsblad voor Nederlandsch-Indie, Nieuwe Rotterdamsche Courant, and Nieuwe Tilburgsche Courant.
- 27 Mayer, Charles (1923): Trapping wild animals in Malay jungles, London.
- 28 Valk, Abraham Cornelie van der (1940): Vangen en jagen in Sumatra's wildernis, Amsterdam.
- 29 Eipper, Paul (1929): Dieren kijken ons aan, s'Gravenhage.
- 30 Tan (2014), The Beastly Business, p. 149.
- 31 Wallace, Alfred Russel (1890): The Malay Archipelago. The Land of the Orangutan and the Bird of Paradise. A Narrative of Travel, with Studies of Man and Nature, London.
- 32 Stoler, Ann Laura (1985): Capitalism and confrontation in Sumatra's plantation belt, 1870–1979, New Haven.
- 33 Ross, Corey (2017): Ecology and Power in the Age of Empire. Europe and the Transformation of the Tropical World, Oxford.
- 34 Rothfels (2002), Savages and Beasts, p. 181.
- 35 The Singapore Free Press and Mercantile Advertiser (Weekly), 14 March 1912, p. 170.
- 36 Keele, Mike (2014): Asian Elephant (Elephas maximus) North American Regional Studbook, Oregon.
- 37 The Singapore Free Press and Mercantile Advertiser (Weekly), 14 March 1912, p. 170; Times Union, 27 November 1927, p 85.
- 38 Dijk, Kees van (2007): The Netherlands Indies and The Great War, 1914–1918, Leiden.
- 39 De Sumatra Post, 9 March 1938, p. 2.
- 40 De locomotief, 30 June 1928, p. 1.
- 41 Valk, Abraham Cornelie van der (1940): Vangen en jagen in Sumatra's wildernis, p. 246–247.
- 42 De locomotief, 30 June 1928, p. 1.
- 43 De Tijd: godsdienstig-staatkundig dagblad, 3 June 1950, p. 7.
- 44 Algemeen handelsblad voor Nederlandsch-Indië, 13 October 1926, p. 6; Eipper (1929), Dieren kijken ons aan.
- 45 Murphy, Joseph (2009): "Environment and Imperialism. Why Colonialism Still Matters", in: *Sustainability Research Institute Papers*, no. 20, p. 15.
- 46 Boomgaard, Peter (1999): "Oriental Nature, Its Friends and Its Enemies. Conservation of Nature in Late-Colonial Indonesia, 1889–1949", in: *Environment and History*, vol. 5, no. 3, p. 257–292.
- 47 Minarchek (2018), Plantations, Peddlers, and Nature Protection, p. 8.
- 48 Mayer (1923), Trapping Wild Animals, p. 27–28.
- 49 Beinart, William; Hughes, Lotte (2007): Environment and Empire, Oxford.
- 50 Mayer (1923), Trapping wild animals, p. 92.
- 51 Ibid., p. 106.
- 52 Chua Ai Lin (2017): "Reel Life Singapore. The Films of Clyde E. Elliott", in: Biblioasia, vol. 13, no. 2, p. 40–45.
- 53 Minarchek (2018), Plantations, Peddlers, and Nature Protection, p. 14.
- 54 Harrison, Barbara (1988): Orang utan, Singapore, p. 143.
- 55 Jones, Marvin L. (1982): "The orangutan in captivity", in: Leobert E. M. de Boer (Ed.): The Orangutan. Its Biology and Conservation, The Hague, p. 21–22
- 56 Jones (1982). The orangutan in captivity. p. 21.
- 57 Eipper (1929), Dieren kijken, p. 71.
- 58 Ibid., p. 104–105.
- 59 Bloembergen, Marieke (2006): Colonial Spectacles. The Netherlands and the Dutch East Indies at the World Exhibitions, 1880–1931, Singapore, p. 30.
- 60 Weide, Eefje van der (2012): Changing Relevance of Space in Time. Colonisation, Globalisation and the Significance of Connectivity, Utrecht.
- 61 Tagliacozzo, Eric (2005): Secret Trades, Porous Borders. Smuggling and States along a Southeast Asian Frontier, 1865–1915, New Haven.

- 62 Minarchek (2018), Plantations, Peddlers, and Nature Protection, p. 13.
- 63 Valk (1940), Vangen en jagen in Sumatra's wildernis, p. 245–262.
- 64 Mayer (1923), Trapping wild animals in Malay jungles, p. 181.
- 65 Soerabaijasch handelsblad, 19 February 1929, p.1; Westermann (1945): Wild Life Conservation, p. 417–424
- 66 Soerabaijasch handelsblad, 9 Februrary1929, p. 1.
- 67 De Sumatra post, 09 March 1927, p. 10
- 68 Dammerman, K. W. (1926): "Preservation of Wild Life and Nature Reserves in the Dutch East Indies", in: *Pan-Pacific science congress*, vol. 3, p. 1103.
- 69 The 1909 regulation encompassed all wild mammals and birds, except for those the governorgeneral would specify as exceptions. These exemptions primarily encompassed two categories. The first one pertained to species for which all restrictions on capture and killing were lifted. Within this group were creatures generally perceived as nuisances, including monkeys and orang-utans, as well as various avian species like kingfishers, barbets, and bulbuls. Additionally, it extended to diverse gamebirds such as pigeons, fowls, and waterfowl. The second category involved species for which Provincial Authority Heads possessed the jurisdiction to annul prohibitive measures partially or completely. This category encompassed legitimate game animals and, alongside what is referred to as "big game", covered parrots and birds of paradise. See: Dammerman (1929), Preservation of wildlife and nature reserves in the Netherlands Indies, p. 2
- 70 Algemeen handelsblad voor Nederlandsch-Indië, 31 May 1926, p. 3.
- 71 De Sumatra post, 9 March 1927, p. 10; Dammerman (1929), Preservation of wildlife, p. 3.
- 72 Ibid., p. 6.
- 73 Ibid., p. 7.
- 74 De locomotief, 9 May 1927, no. 103.
- 75 Minarchek (2018), Plantations, Peddlers, and Nature Protection, p. 15.
- 76 De Locomotief, 25 July 1928, no. 169.
- 77 Nieuwe Rotterdamsche Courant, 19 August 1928, p. 9.
- 78 Jones, Dena M (1996): "American Media Coverage of Animal Protection", in: Anthrozoös, vol. 9, no. 2, p. 72–280.
- 79 De Locomotief, 25 July 1928; Nieuwe Rotterdamsche Courant, 19 August 1928, p. 9.
- 80 Boomgaard (1999), Oriental Nature, Its Friends and Its Enemies, p. 270.
- 81 Deli courant, 2 February 1932, p. 14.
- 82 De Indische courant, 5 March 1935, p. 5.
- 83 Algemeen handelsblad voor Nederlandsch-Indië, 26 February 1932, p. 9.
- 84 Minarchek (2018), Plantations, Peddlers, and Nature Protection, p. 23–24.
- 85 Kisling, Vernon N. (1998): "Colonial Menageries and the Exchange of Exotic Faunas", in: Archives of Natural History, vol. 25, no. 3, p. 303–320.
- 86 Walker, Sally (2022): "Zoological Gardens of Asia", in: Vernon N. Kisling (Ed.): Zoo and Aquarium History. Ancient Animal Collections to Conservation Centers, Boca Raton, London, New York, p. 237–256.
- 87 Barnard, Timothy (2019): Imperial Creatures. Humans and other Animals in Colonial Singapore, 1819–1942, Singapore.
- 88 Koenders, W. (1939): Bataviasche Planten- en Dierentuin, 1864–1939. gedenkboek ter gelegenheid van het 75-jarig bestaan, Batavia.
- 89 Het nieuws van den dag voor Nederlandsch-Indië, 8 June 1937, p. 23.
- 90 Ibid.
- 91 De locomotief, 14 April 1938, No. 87.
- 92 Het vrije volk: democratisch-socialistisch dagblad, 5 January 1955, p. 7.
- 93 De Sumatra post, 19 October 1937, p. 2

- 94 Deli courant, 19 October 1937, p. 1.
- 95 Ibid.
- 96 Het nieuws van den dag voor Nederlandsch-Indië, 3 August 1936, p. 7
- 97 De locomotief, 7 September 1935, No. 208.
- 98 Appadurai, Arjun (2017): "Museum objects as accidental refugees", in: Historische Anthropologie, vol. 25, no.3, p. 401–408.
- 99 Alexander, Edward P.; Alexander, Mary; Decker, Juilee (2022): *Museums in Motion. An Introduction to the History and Functions of Museums, Third Edition*, Lanham.
- 100 Ritvo, Harriet (2007): "On the Animal Turn", in: Daedalus, vol. 136, no. 4, p. 118-122.