

## Atlas Ichthyologique: A Fishy Legacy



Portrait of Dr. P. Bleeker<sup>1</sup>.

### How it all began

Pieter Bleeker's remarkable journey from modest beginnings in the Netherlands to becoming one of the most respected ichthyologists of the Indo-Pacific has inspired countless zoologists worldwide. Born in 1819 to a family of sailmakers in Zaandam, Bleeker began his career as an assistant to the local pharmacist and later managed to enrol in a pharmaceutical programme in Haarlem. He later entered into the service to the Dutch East Indies Army as a military surgeon and was posted to Batavia (now Jakarta) in 1842. It was then when he was living in Jakarta that his fascination for the flora and fauna of the Dutch East Indies (now Indonesia) took root<sup>2</sup>.

Bleeker dedicated his free time to collecting, studying, and learning to document and illustrate the diverse fish species of what is today the Indonesian archipelago. This was no easy task as the lack of scientific information, funding and space were critical setbacks to his research. This prompted him to turn to the Dutch colonial government for assistance.

“I proposed them to support my research financially by giving a grant for the publication of an ichthyological Fauna of the Dutch East Indies, illustrated with figures of the least known and new species...My request, was not just a plea for a free allowance, but it was accompanied by the offer than my collections would be donated to the government, to be incorporated in the Natural History Museum in Leiden.”

—Bleeker’s notes from *Notice sur l’Atlas Ichthyologique des Indes Orientales Néerlandaises*, translated to english<sup>3</sup>.

This request, however, was rejected by the colonial government. In the years that followed, Bleeker relied on his own means to further his research. As the adjunct of the chief medical officer, librarian of the Bataafse Genootschap (Batavian Society), and the editor of a newly founded scientific journal, Bleeker started gaining political influence. This eventually led to some conflict with the colonial officials, and he was banned from the capital from 1847 to 1849. During this period, he was relocated several times, first to Samarang, then to Soerabaia, and Ambawara. His collections, however, were left in Batavia. Lacking the time and means, he was only able to commit to his scientific pursuits at a low level during this period<sup>3,5</sup>.

It was not until 1849 that he was able to tap upon his relations with the main islands to build upon his collection. In 1850, Bleeker was appointed as chairman of the Société royale de physique des Indes néerlandaises or the Koninklijke Natuurkundige Vereeniging in Nederlands Indië (Royal Physical Society of the Netherlands Indies) in Batavia. This granted him access to the numerous shipments of specimens from across the region, including Singapore.

### **Building the collection**

Bleeker’s extensive collection was not amassed through his efforts alone. Predominantly working from the Dutch East Indies, Bleeker did not have many opportunities to expand his collection beyond the territory. When he assumed the position of chairman to the Société royale de physique des Indes néerlandaises in 1850, he began sending out shipments of alcohol and jars to familiar European military and civil servants dispersed over the region. Through this, his cabinet would become enriched by their collections from across the Dutch East Indies, Singapore, Bengal, Japan and even Tasmania.



*Omobranchus zebra* (Bleeker, 1868) holotype specimen collected by Pieter Bleeker in Singapore in 1860. (Naturalis Biodiversity Center, RMNH.PISC.4454). Imaged by [SIGNIFY](http://SIGNIFY).

“Before my departure to Europe, in 1860, I possessed more than 2,500 fish species, of which 2,000 were from the Indian Archipelago. The number of new species I had described in the Indies had risen to above 1,100.”

—Bleeker’s notes from *Notice sur l’Atlas Ichthyologique des Indes Orientales Néerlandaises*, translated to english<sup>3</sup>.

### The *Atlas Ichthyologique*

Bleeker’s influence extended globally as he fostered valuable connections with museums and naturalists across continents. His work linked European museums to the biodiversity of Southeast Asia and formed a foundation that connected him to prominent collaborators. The acting director of the Rijksmuseum van Natuurlijke Historie (RMNH), Coenraad Jacob Temminck, had also sought out Bleeker’s fish collection. An exchange was struck—out of gratitude for Temminck’s assistance in persuading the Dutch government to support his

efforts, Bleeker willingly contributed to enriching the collection in Leiden. From 1853, over 16,000 specimens of fish from what is today called Southeast Asia were shipped off to Leiden. As a result, numerous fish specimens collected in Singapore remain in their care.

It was only in 1860 that Bleeker could return to the Netherlands and begin publishing the *Atlas Ichthyologique*—a project that had been over 17 years in the making. Over the course of his life, Bleeker published 518 scientific papers, described 1,925 species and 520 genera. This vast body of work has inspired generations of ichthyologists to approach their field with the same passion and interdisciplinary lens. One such ichthyologist was Eric Ronald Alfred, a Malayan-born zoologist who later became the first Singaporean director of the National Museum between 1967 and 1973. Alfred himself was inspired by a copy of Bleeker's *Atlas* when he worked at the Raffles Library and Museum in Singapore, making it a transformative exposure that fomented his interest in ichthyological work.

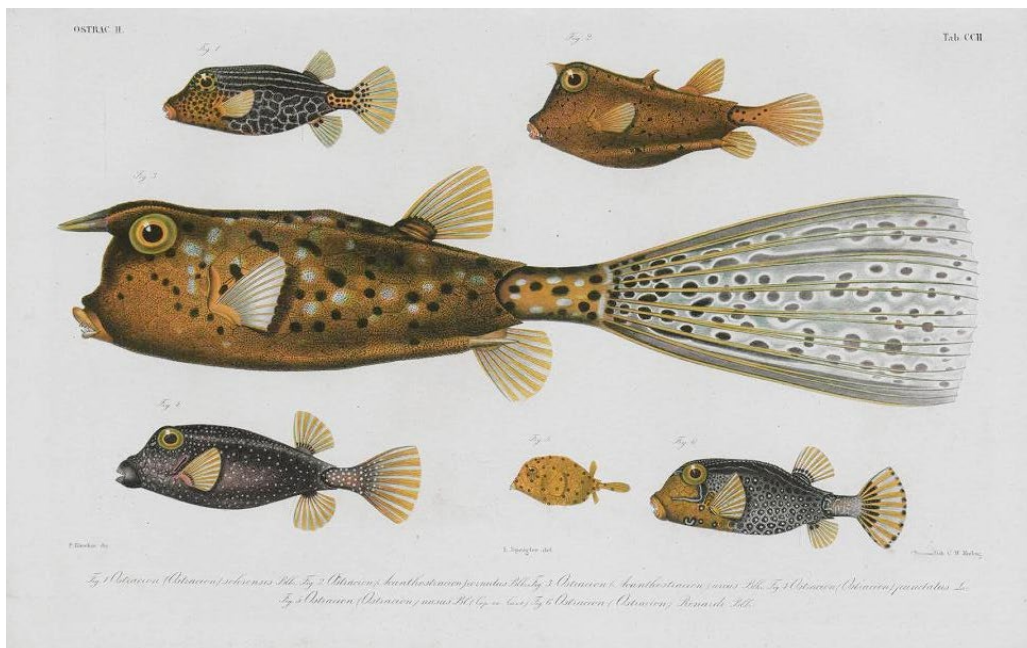


Illustration plates from Bleeker's *Atlas* that inspired Alfred<sup>4</sup>.

Bleeker's life and legacy underscores the impact of international networks in advancing natural history. His connections bridged the European and Southeast Asian natural history communities, illustrating the power of shared knowledge across continents.



Illustrations of the genus *Pseudoscarus* by Dr. P. Bleeker<sup>4</sup>.

*Atlas Ichthyologique des Indes Orientales Néerlandaises*—a monumental account on the fishes of the Indonesian Archipelago with colored illustrations, published by Pieter Bleeker between 1862–1878. Comprised of nine substantial volumes, the *Atlas* remains a significant resource for ichthyology, and Bleeker’s work would earn him widespread recognition and a legacy for decades to come.

**Research and text by: Calista Wong**

## References

1. Naturalis H collection (Unknown date) Dr Pieter Bleeker, undated photograph from the Holthuis collection, Naturalis. Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Pieter\\_Bleeker.jpg](https://commons.wikimedia.org/wiki/File:Pieter_Bleeker.jpg). (Accessed 8 January 2025).
2. Müller J (2023) Naming the World: Pieter Bleeker's Travels and the Challenges of Archipelagic Biodiversity. In: *Animals in Dutch Travel Writing, 1800-present*. Leiden University Press, Leiden, pp. 79–98.
3. van Oijen MJP (2005) Data on the Genesis of the Atlas Ichthyologique from a Little-Known French Paper by P. Bleeker. *Raffles Bulletin of Zoology*, (13): 3–8.
4. Bleeker P (1862) *Atlas ichthyologique des Indes orientales néerlandaises : publié sous les auspices du gouvernement colonial néerlandais*. (F. Muller, ed.). Amsterdam, Volume T.1–2, 101 pp.
5. Carpenter KE (2007) A short biography of Pieter Bleeker. *Raffles Bulletin of Zoology Supplement 14*: 5–6.