

A SHORT BIOGRAPHY OF PIETER BLEEKER

Kent E. Carpenter

Department of Biological Sciences, Old Dominion University, Virginia, USA.
Email: kcarpent@odu.edu

KEY WORDS. – Biography, Pieter Bleeker.

Pieter Bleeker rose from humble beginnings to become one of the greatest ichthyologists and the most prolific in the Indo-Pacific. Born in 1819, in a small town just North of Amsterdam, his middle-class family could not afford a higher education for him past the age of 12. However, thanks to an early friendship with a pharmacist who lived in a part of his parental home, he managed to continue his education and became certified, first as a pharmacist and by the age of 22, as a civic surgeon and country doctor. Later in his education, he became more interested in physiology and zoology. He read widely about these subjects in the library of the Museum in Haarlem. He believed that his youthful appearance would preclude him from practising as a physician and since he was feeling more inclined towards natural history than medicine, he applied for a job at the Rijksmuseum van Natuurlijke Historie in Leiden. After he was told there was no vacancy, he decided to continue his medical studies in Paris for as long as his funds would allow. When he returned after six months, he tried once more in vain to get a job at the Leiden Museum. He then decided to become a medical officer in the East Indian Army as he was still not inclined to settle down as a practising physician.

In 1842, Bleeker arrived in Batavia (= Jakarta) as a third class military surgeon and departed 18 years later as one of the colony's most distinguished residents. Bleeker has been described as a man with unbounded energy, remarkable intelligence, zealousness in pursuit of knowledge and undaunted perseverance. All these qualities were prerequisites for success in the study of the largely unknown fauna in the epicentre of marine biodiversity. This is especially so when these studies took place in his spare time, in addition to his duties as an army surgeon.

He perceived early on that the study of medicine and natural history was neglected in the Dutch East Indies and founded a journal to stimulate the publication of research in these fields. Bleeker's first research emphasis was on the natural and medical topography of Batavia. When he tried to identify fishes occurring at Batavia, he soon discovered several

unknown species. The prospect of a rich harvest for science, combined with the fact that collecting fishes (at the fish market) was neither time consuming nor very expensive and that they were easy to preserve, fixed his primary interest in this magnificent group.

Bleeker spent most of his career in the capital Batavia, in the Dutch East Indies, which had a society sufficient to support his scientific interests. His position as adjutant of the chief medical officer, librarian of the Bataafse Genootschap [Batavian Society] and editor of a newly-founded scientific journal, put him in proximity to political power and his strong personality eventually put him in conflict with colonial officials. The government's distrust of Bleeker's interest in population statistics and open criticism of the high cost of postage were not appreciated and he was banned from the capital from 1847 - 1849.

During this time, he served as surgeon in several outposts elsewhere in Java and time for ichthyological research was very limited. However, after he returned to Batavia, Bleeker successfully revived the scientific community and encouraged many colleagues on islands scattered throughout the archipelago to collect fishes for him. The only time Bleeker left Java was in 1855, when he accompanied the governor-general on an official expedition to Celebes (= Sulawesi) and the Moluccas. He made extensive collections during the trip.

Bleeker was furloughed back to the Netherlands in 1860. The main purpose for his departure was for the publication of the *Atlas Ichthyologique*. Printing facilities in Batavia were limited and certainly inadequate for the quality Bleeker hoped for. He conceived this project in 1845, three years after arriving in Batavia and it is evident that his numerous scientific articles were intended as preparatory work for this crowning achievement. Instead of returning to Batavia after his furlough expired, Bleeker decided to request for his pension so that he could directly oversee the production of the *Atlas*. In addition, he devoted time to the study of fishes in museums from places other than the East Indies. He also

became very active in Dutch scientific societies and flirted with political involvement. Bleeker visited and corresponded with most of the famous ichthyologists of his time. In Batavia, Bleeker had made special collections for a number of museums throughout Europe. This and the excellence of his published volumes of the *Atlas*, gained many honours for him.

During his life, he sold both unique specimens (including type specimens) and duplicates to the British Museum, but he kept the larger part of his private collection together. The greater part of Bleeker's collection (some 18,000 specimens) was eventually bought by the Rijksmuseum van Natuurlijke Historie in Leiden after Bleeker's death in 1878. At that time, only eight and part of the ninth of the 14 planned volumes of the *Atlas Ichthyologique* were completed. Parts of the final volumes were lost but others were later revived and worked on but it was not until 1983 that all remaining plates were published.

Bleeker's work represents the most prolific of any Indo-Pacific ichthyologist. Although he published on fishes around the Indo-Pacific, Europe, Africa and South America, the vast majority of the taxa of fishes he described, were from Indonesia. He described 1,925 new species (more than any other ichthyologist) of which 743 remain valid. This is second only to Albert Günther, who described 847 valid species (W.N. Eschmeyer, personal communication). He also described a total of 520 genera, of which 298 remain valid (more valid genera than any other ichthyologists). He published 518 scientific articles, mostly in French, Dutch and Latin but also several in English. He founded two scientific journals and edited 22 of their volumes. Although ichthyology was by far his greatest passion, he also published on terrestrial vertebrates, marine and terrestrial invertebrates, botany, medicine, geology, anthropology, government, religion, history, agriculture and statistics, amongst others.

Pieter Bleeker is an ideal model for all Indo-Pacific ichthyologists. His social consciousness, adventurous spirit and passion in the quest of knowledge are qualities that need to come to bear on the numerous remaining ichthyological mysteries of the Indo-Pacific. The ultimate goal is to conserve fishes and to provide a broader scientific base for future generations of ichthyologists.

ACKNOWLEDGMENTS

I thank W. Eschmeyer and R. Pyle for help compiling statistics about Bleeker's species' descriptions. I am particularly grateful to Martien J.P. van Oijen who provided many suggestions that helped with the accuracy of this short biography.

BIBLIOGRAPHY

- Bleeker, P., 1973. Biographical Notices. In: Lamme, W. H. (ed.), *Collected Fish Papers of Pieter Bleeker*. Antiquariaat Junk B.V., Lochem, The Hague. Pp. 11-42.
- Boeseman, M., 1973. Introduction. In: Lamme, W. H. (ed.), *Collected Fish Papers of Pieter Bleeker*. Antiquariaat Junk B.V., Lochem, The Hague. Pp. 3-6.
- Boeseman, M., 1983. Introduction. In: Bleeker, P. (ed.), *Atlas Ichthyologique des Indes Orientales Néerlandaises; plates originally prepared for planned tomes XI-XIV*. Smithsonian Institution Press, Washington. Pp. 1-12.
- Harting, P., 1973. Preface, The Autobiography of Pieter Bleeker. In: Lamme, W. H. (ed.), *Collected Fish Papers of Pieter Bleeker*. Antiquariaat Junk B.V., Lochem, The Hague. Pp. 7-10.