XXVII. Some Observations on the Bill of the Toucan; in a Letter to the Right Hon. Sir Joseph Banks, Bart. K.B. P.R.S. H.M.L.S. By Thomas Stewart Traill, M.D.

Read March 15, 1814.

SIR,

Your polite attention to me on former occasions emboldens me to trouble you with the following observations on the bill of the Toucan.

All systematic authors have described the bill of the genus Ramphastos as hollow. The Linnæan character even begins, " Rostrum maximum inane," &c.; and Buffon has eloquently enlarged on the supposed error, or oversight of Nature, in furnishing so small a bird with a bill so monstrous and useless. My friend Charles Waterton, Esq., who has lately returned from the interior of Guyana, had observed, that when a portion of the bill of a Toucan is shot away, the remainder bleeds profusely; and on immersing the bill of a recently killed bird in hot water, he was enabled to detach from the exterior covering of the bill a horny substance, which filled its whole cavity, consisting of a delicate net-work of bony matter in the interior, surrounded by thin plates of the same material. On these bony partitions a great number of blood-vessels are distinctly ramified in the living animal. This gentleman favoured me with a specimen thus prepared; in carefully examining which, I found that the nostrils conducted to the internal cells of the substance within the upper mandible.



Traill, Thomas Stewart and Traill, Thomas Stewart. 1815. "XXVII. Some Observations on the Bill of the Toucan; in a Letter to the Right Hon. Sir Joseph Banks, Bart. K.B. P.R.S. N.M.L.S." *Transactions of the Linnean Society of London* 11, 288–289. https://doi.org/10.1111/j.1096-3642.1813.tb00061.x.

View This Item Online: https://www.biodiversitylibrary.org/item/13721

DOI: https://doi.org/10.1111/j.1096-3642.1813.tb00061.x

Permalink: https://www.biodiversitylibrary.org/partpdf/19712

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.