

***JAMES EMERSON
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***SKETCHES
OF THE NATURAL
HISTORY
OF CEYLON***

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Sketches of the Natural History of Ceylon

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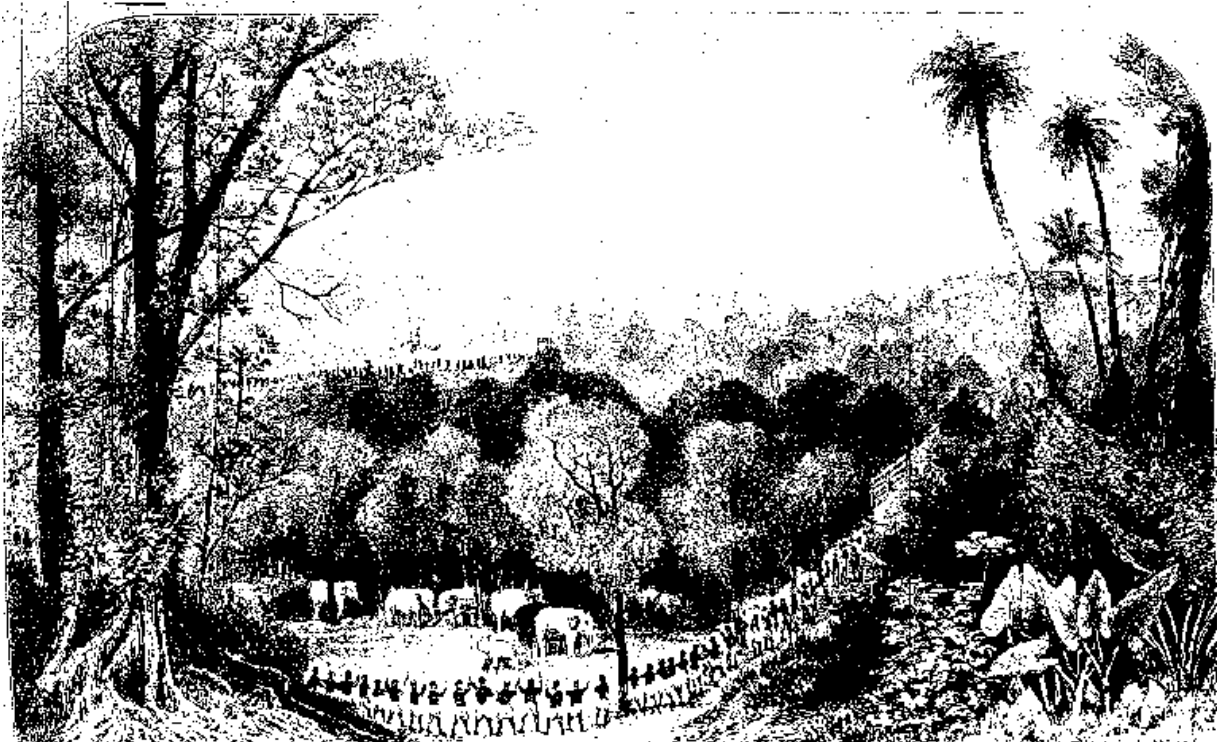
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INTRODUCTION.

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A considerable portion of the contents of the present volume formed the zoological section of a much more comprehensive work recently published, on the history and present condition of Ceylon.¹ But its inclusion there was a matter of difficulty; for to have altogether omitted the chapters on Natural History would have impaired the

completeness of the plan on which I had attempted to describe the island; whilst to insert them as they here appear, without curtailment, would have encroached unduly on the space required for other essential topics. In this dilemma, I was obliged to adopt the alternative of so condensing the matter as to bring the whole within the prescribed proportions.

But this operation necessarily diminished the general interest of the subjects treated, as well by the omission of incidents which would otherwise have been retained, as by the exclusion of anecdotes calculated to illustrate the habits and instincts of the animals described.

A suggestion to re-publish these sections in an independent form has afforded an opportunity for repairing some of these defects by revising the entire, restoring omitted passages, and introducing fresh materials collected in Ceylon; the additional matter occupying a very large portion of the present volume.

I have been enabled, at the same time, to avail myself of the corrections and communications of scientific friends; and thus to compensate, in some degree for what is still incomplete, by increased accuracy in minute particulars.

In the Introduction to the First Edition of the original work I alluded, in the following terms, to that portion of it which is now reproduced in an extended form:—

"Regarding the *fauna* of Ceylon, little has been published in any collective form, with the exception of a volume by Dr. KELAART entitled *Prodromus Faunæ Zeilanicæ*; several valuable papers by Mr. EDGAR L. LAYARD in the *Annals and Magazine of Natural History* for 1852 and 1853; and some

very imperfect lists appended to PRIDHAM'S compiled account of the island.² KNOX, in the charming narrative of his captivity, published in the reign of Charles II., has devoted a chapter to the animals of Ceylon, and Dr. DAVY has described some of the reptiles: but with these exceptions the subject is almost untouched in works relating to the colony. Yet a more than ordinary interest attaches to the inquiry, since Ceylon, instead of presenting, as is generally assumed, an identity between its *fauna* and that of Southern India, exhibits a remarkable diversity, taken in connection with the limited area over which the animals included in it are distributed. The island, in fact, may be regarded as the centre of a geographical circle, possessing within itself forms, whose allied species radiate far into the temperate regions of the north, as well as in to Africa, Australia, and the isles of the Eastern Archipelago.

"In the chapters that I have devoted to its elucidation, I have endeavoured to interest others in the subject, by describing my own observations and impressions, with fidelity, and with as much accuracy as may be expected from a person possessing, as I do, no greater knowledge of zoology and the other physical sciences than is ordinarily possessed by any educated gentleman. It was my good fortune, however, in my journeys to have the companionship of friends familiar with many branches of natural science: the late Dr. GARDNER, Mr. EDGAR L. LAYARD, an accomplished zoologist, Dr. TEMPLETON, and others; and I was thus enabled to collect on the spot many interesting facts relative to the structure and habits of the numerous tribes. These, chastened by the corrections of my

fellow-travellers, and established by the examination of collections made in the colony, and by subsequent comparison with specimens contained in museums at home, I have ventured to submit as faithful outlines of the *fauna* of Ceylon.

"The sections descriptive of the several classes are accompanied by lists, prepared with the assistance of scientific friends, showing the extent to which each particular branch had been investigated by naturalists, up to the period of my departure from Ceylon at the close of 1849. These, besides their inherent interest, will, I trust, stimulate others to engage in the same pursuit, by exhibiting chasms, which it remains for future industry and research to fill up;—and the study of the zoology of Ceylon may thus serve as a preparative for that of Continental India, embracing, as the former does, much that is common to both, as well as possessing a *fauna* peculiar to the island, that in itself will amply repay more extended scrutiny.

"From these lists have been excluded all species regarding the authenticity of which reasonable doubts could be entertained³, and of some of them, a very few have been printed in *italics*, in order to denote the desirability of more minute comparison with well-determined specimens in the great national depositories before finally incorporating them with the Singhalese catalogues.

"In the labour of collecting and verifying the facts embodied in these sections, I cannot too warmly express my thanks for the aid I have received from gentlemen interested in similar studies in Ceylon: from Dr. KELAART⁴ and Mr. EDGAR L. LAYARD, as well as from officers of the

Ceylon Civil Service; the Hon. GERALD C. TALBOT, Mr. C.R. BULLER, Mr. MERCER, Mr. MORRIS, Mr. WHITING, Major SKINNER, and Mr. MITFORD.

"Before venturing to commit these chapters of my work to the press, I have had the advantage of having portions of them read by Professor HUXLEY, Mr. MOORE, of the East India House Museum; Mr. R. PATTERSON, F.R.S., author of the *Introduction to Zoology*; and by Mr. ADAM WHITE, of the British Museum; to each of whom I am exceedingly indebted for the care they have bestowed. In an especial degree I have to acknowledge the kindness of Dr. J.E. GRAY, F.R.S., for valuable additions and corrections in the list of the Ceylon Reptilia; and to Professor FARADAY for some notes on the nature and qualities of the "Serpent Stone,"⁵ submitted to him.

"The extent to which my observations on *the Elephant* have been carried, requires some explanation. The existing notices of this noble creature are chiefly devoted to its habits and capabilities *in captivity*; and very few works, with which I am acquainted, contain illustrations of its instincts and functions when wild in its native woods. Opportunities for observing the latter, and for collecting facts in connection with them, are abundant in Ceylon; and from the moment of my arrival, I profited by every occasion afforded to me for observing the elephant in a state of nature, and obtaining from hunters and natives correct information as to its oeconomy and disposition. Anecdotes in connection with this subject, I received from some of the most experienced residents in the island; amongst others, from Major SKINNER, Captain PHILIP PAYNE GALLWEY, Mr. FAIRHOLME,

Mr. CRIPPS, and Mr. MORRIS. Nor can I omit to express my acknowledgments to Professor OWEN, of the British Museum, to whom this portion of my manuscript was submitted previous to its committal to the press."

To the foregoing observations I have little to add beyond my acknowledgment to Dr. ALBERT GÜNTHER, of the British Museum, for the communication of important facts in illustration of the ichthyology of Ceylon, as well as of the reptiles of the island.

Mr. BLYTH, of the Calcutta Museum, has carefully revised the Catalogue of Birds, and supplied me with much useful information in regard to their geographical distribution. To his experienced scrutiny is due the perfected state in which the list is now presented. It will be seen, however, from the italicised names still retained, that inquiry is far from being exhausted.

Mr. THWAITES, the able Director of the Royal Botanic Gardens at Peradenia, near Kandy, has forwarded to me many valuable observations, not only in connection with the botany, but the zoology of the mountain region. The latter I have here embodied in their appropriate places, and those relating to plants and vegetation will appear in a future edition of my large work.

To M. NIETNER, of Colombo, I am likewise indebted for many particulars regarding Singhalese Entomology, a department to which his attention has been given, with equal earnestness and success.

Through the Hon. RICHARD MORGAN, acting Senior Puisne Judge of the Supreme Court at Colombo, I have received from his Interpreter, M.D. DE SILVA GOONERATNE

MODLIAR, a Singhalese gentleman of learning and observation, many important notes, of which I have largely availed myself, in relation to the wild animals, and the folklore and superstitions of the natives in connection with them.

Of the latter I have inserted numerous examples; in the conviction that, notwithstanding their obvious errors in many instances, these popular legends and traditions occasionally embody traces of actual observation, and may contain hints and materials deserving of minuter inquiry.

I wish distinctly to disclaim offering the present volume as a compendium of the Natural History of Ceylon. I present it merely as a "mémoire pour servir," materials to assist some future inquirer in the formation of a more detailed and systematic account of the *fauna* of the island. My design has been to point out to others the extreme richness and variety of the field, the facility of exploring it, and the charms and attractions of the undertaking. I am eager to show how much remains to do by exhibiting the little that has as yet been done.

The departments of *Mammalia* and *Birds* are the only two which can be said to have as yet undergone tolerably close investigation; although even in these it is probable that large additions still remain to be made to the ascertained species. But, independently of forms and specific characteristics, the more interesting inquiry into habits and instincts is still open for observation and remark; and for the investigation of these no country can possibly afford more inviting opportunities than Ceylon.

Concerning the *Reptilia* a considerable amount of information has been amassed. The Batrachians and smaller Lizards have, I apprehend, been imperfectly investigated; but the Tortoises are well known, and the Serpents, from the fearful interest attaching to the race, and stimulating their destruction, have been so vigilantly pursued, that there is reason to believe that few, if any, varieties exist which have not been carefully examined. In a very large collection, made by Mr. CHARLES REGINALD BULLER during many years' residence in Kandy, and recently submitted by him to Dr. Günther, only one single specimen proved to be new or previously unknown to belong to the island.

Of the *Ichthyology* of Ceylon I am obliged to speak in very different terms; for although the materials are abundant almost to profusion, little has yet been done to bring them under thoroughly scientific scrutiny. In the following pages I have alluded to the large collection of examples of Fishes sent home by officers of the Medical Staff, and which still remain unopened, in the Fort Pitt Museum at Chatham; but I am not without hope that these may shortly undergo comparison with the drawings which exist of each, and that this branch of the island *fauna* may at last attract the attention to which its richness so eminently entitles it.

In the department of Entomology much has already been achieved; but an extended area still invites future explorers; and one which the Notes of Mr. Walker prefixed to the List of Insects in this volume, show to be of extraordinary interest, from the unexpected convergence in Ceylon of

characteristics heretofore supposed to have been kept distinct by the broad lines of geographical distribution.

Relative to the inferior classes of *Invertebrata* very little has as yet been ascertained. The Mollusca, especially the lacustrine and fluviatile, have been most imperfectly investigated; and of the land-shells, a large proportion have yet to be submitted to scientific examination.

The same may be said of the *Arachnida* and *Crustacea*. The jungle is frequented by spiders, *phalangia*⁶, and acarids, of which nothing is known with certainty; and the sea-shore and sands have been equally overlooked, so far as concerns the infinite variety of lobsters, crayfish, crabs, and all their minor congeners. The *polypi*, *echini*, *asterias*, and other *radiata* of the coast, as well as the *acalephæ* of the deeper waters, have shared the same neglect: and literally nothing has been done to collect and classify the infusoriæ and minuter zoophytes, the labours of Dr. Kelaart amongst the Diatomaceæ being the solitary exception.

Nothing is so likely to act as a stimulant to future research as an accurate conception of what has already been achieved. With equal terseness and truth Dr. Johnson has observed that the traveller who would bring back knowledge from any country must carry knowledge with him at setting out: and I am not without hope that the demonstration I now venture to offer, of the little that has already been done for zoology in Ceylon, may serve to inspire others with a desire to resume and complete the inquiry.

J. EMERSON TENNENT

London: November 1st, 1861.

Footnote 1: [\(return\)](#)

Ceylon: An Account of the Island, Physical, Historical, and Typographical; with Notices of its Natural History, Antiquities, and Productions. By Sir JAMES EMERSON TENNENT, K.C.S., LL.D., &c. Illustrated by Maps. Plans, and Drawings. 2 vols. 8vo. Longman and Co., 1859.

Footnote 2: [\(return\)](#)

An Historical, Political, and Statistical Account of Ceylon and its Dependencies, by C. PRIDHAM, Esq. 2 vols. 8vo., London, 1849.

Footnote 3: [\(return\)](#)

An exception occurs in the list of shells, prepared by Mr. SYLVANUS HANLEY, in which some whose localities are doubtful have been admitted for reasons adduced. (See p. 387.)

Footnote 4: [\(return\)](#)

It is with deep regret that I have to record the death of this accomplished gentleman, which occurred in 1860.

Footnote 5: [\(return\)](#)

See p. 312.

Footnote 6: [\(return\)](#)

Commonly called "harvest-men."

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