# BRITISH MUSEUM (NATURAL HISTORY). FIRST REPORT ON ECONOMIC ZOOLOGY

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British Museum (Natural History). First Report on Economic Zoology by Fred. V. Theobald

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# FRED. V. THEOBALD

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# FIRST REPORT

ON

# ECONOMIC ZOOLOGY

BY

### FRED. V. THEOBALD, M.A.,

PORMICK NUMBER OF THE ASSOCIATION OF BOONDED ESTOMOLOGISTS, WASHINGTON, U.S.A.;
2001.04157 TO THE BOUTH-RASTERN AGRICULTURAL COLLEGE; 200.

Author of "A Monograph of the Culicidae (Mosquitoes) of the World (Brit. Mus.)";
"A Text-Book of Agricultural Zoology"; "The Parasitic Diseases of Poultry";
"An Account of British Files," etc.

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1903.

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### PREFACE.

The present volume consists primarily of a series of Reports to the Board of Agriculture, of Reports and letters to a variety of unofficial correspondents, and of Reports to the Foreign Office and to the Colonial Office, drawn up by Mr. F. V. Theobald during the years 1901-1902. Mr. Theobald has recently been employed by the Trustees of the British Museum to assist the Director in such work, especially with a view to furnishing the Board of Agriculture with scientific information on Economic Zoology, in accordance with a request made by that Department of his Majesty's Government. Mr. Theobald is well known as an authority on Economic Zoology, and has the advantage, in carrying out his work at the Natural History Museum, of consulting with the various specialists on the scientific staff, as well as of making use of the collections and library of the Museum.

I have added to Mr. Theobald's Reports an introductory scheme or outline of the study known as Economic Zoology, in the form of a classified survey of the various sub-divisions which it is found convenient to recognise in the treatment of this subject. For this classification I am responsible, whilst Mr. Theobald has been good enough to fill in the list of selected examples. I have also added some correspondence on Tsetse-fly disease, and on the proposed investigation of the Pearl Fisheries of Ceylon, and on the Marine Resources of the West Indies, which arose from my being consulted in my official capacity by his Majesty's Secretaries of State for Foreign Affairs and for the Colonies.

The Trustees have ordered the publication of the present Report, in order that the valuable information which it contains may be made easily accessible; and further, in order to make clear the nature and amount of scientific information on matters of economic importance which the staff of the Zoological Department is almost daily called upon and is prepared to furnish to the public service or to individuals. It must be remembered that the Reports and letters printed in this volume form only a portion of the work of economic importance which is carried out by this Museum, in addition to the

far more extensive work in the pure science of Natural History, which is the primary occupation of its official staff. The Trustees published in 1901 a descriptive treatise on Mosquitoes in three volumes, with forty-two plates, which was prepared by Mr. Theobald in connection with the specimens of Culicidæ already in the Museum, and others specially collected for the work, with a view to assisting in the study of the relationship of Culicidæ to Malaria and other diseases. A supplementary volume of this work, by Mr. Theobald, has been completed and published in the present year. Also in the present year the Trustees have published an illustrated monograph on the Tsetse-flies, by Mr. Austen, Assistant in the Zoological Department. Our rapidly increasing knowledge of the activity of the minute parasites known as Trypanosoma, as the specific causes of disease both in man and in horses and cattle, renders an accurate knowledge of the species of Tsetse-flies necessary, since one of these flies, the Glossina moritans of Westwood, is the carrier of the Trypanosoma causing the deadly disease of horses and cattle known in South Africa as Nagana, and it is possible that other species of Glossina are concerned, in a similar way, in the distribution of disease.

It is not, however, only in correspondence and publications, and in the researches of the naturalists of the staff that this Museum renders direct assistance to the development of the knowledge and application of Economic Zoology. The large study collections of the Museum have, for a long time past, comprised important series from all parts of the world of carefully named and recorded specimens of animals having economic importance, either as pests or as sources of commercial products. In addition to these, several cases are now exhibited in the North Hall of the Museum, in which the life-history and activities of animals important to man in one or other of the relations recognised in the classification adopted in this volume, are illustrated with a view to the edification of the public, and the promotion of the public interest in the thorough scientific treatment of the subject.

I have to thank the Board of Agriculture for permission to reproduce some of the Reports furnished to the Board.

E. RAY LANKESTER.

BRITISH MUSEUM (NATURAL HISTORY), LONDON, S.W.

May 15th, 1908.

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