

**THE OXFORD GEOGRAPHIES:
ANIMAL GEOGRAPHY, THE
FAUNAS OF THE NATURAL
REGIONS OF THE GLOBE**

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Marion I. Newbigin & A. J. Herbertson

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MARION I. NEWBIGIN & A. J. HERBERTSON

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THE OXFORD GEOGRAPHIES

EDITED BY A. J. HERBERTSON

ANIMAL GEOGRAPHY

THE FAUNAS OF THE NATURAL
REGIONS OF THE GLOBE

BY

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PREFACE

WITHIN the last few years, as is well known, botanical geography has made great strides. The intimate relation between the vegetative covering and the physical conditions has been in many cases thoroughly worked out, and all the more modern geographical text-books give at least some indication of the results obtained. On the other hand, the more difficult subject of the relation between the animals of the various natural regions and their surroundings has been much less fully treated by geographers. The facts have still mostly to be sought in zoological text-books, where they are treated from another point of view, and many even of the most recent geographical text-books show uncertainty of treatment when dealing with the animals of tropical forest and arctic tundra. The present book is an attempt to put the main facts connected with the distribution of animals in a form acceptable to the geographical student, and has been written by one whose approach to geography was first made from the biological side.

The sources of the illustrations are indicated beneath each, and I am greatly indebted to the various gentlemen named for permission to reproduce their photographs. Special acknowledgement should be made to Sir Thomas Carlaw Martin, Director of

the Royal Scottish Museum, and Mr. Eagle Clarke, Keeper of the Natural History Collection there, for permission to photograph a number of specimens in the collection.

For the index I am indebted to my sister, Miss Florence Newbigin.

MARION I. NEWBIGIN.

EDINBURGH, 1913.

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INTRODUCTION

THE NATURAL REGIONS OF THE GLOBE

THE modern interest in the facts of the distribution of animals, as indeed the modern interest in so many of the problems connected with biology, dates from the publication of the *Origin of Species*. Darwin in his famous voyage on the *Beagle* was much struck by the curious phenomena of distribution which that voyage brought before his eyes, and it was these phenomena which helped to direct his attention to that line of thought which resulted ultimately in the publication of his theory of Natural Selection. The two facts which especially struck him were the two set forth in the chapters on distribution in the *Origin of Species*. These are, first, that similarity of physical conditions does not necessarily result in a similar fauna, and conversely. For example, there is considerable uniformity in the fauna of South America throughout its length and breadth, even though we find there every variety of physical conditions, from the cold deserts of the high Andes to the luxuriance of the Brazilian forest, or from the burning deserts of Chile to the grassy plains of the Argentine. On the other hand, there is very little resemblance between the animals of the grassy plains of South America and those of Africa, despite the similarity in physical conditions. The second point which struck him was that the resemblances or differences between the faunas of two areas are directly