

**THE HUMBLE-BEE: ITS LIFE-HISTORY  
AND HOW TO DOMESTICATE IT,  
WITH DESCRIPTIONS OF ALL THE  
BRITISH SPECIES OF BOMBUS AND  
PSITHYRUS**

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A PET QUEEN OF *BOMBUS TERRESTRIS* INCUBATING HER BROOD.

(See page 130.)

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# THE HUMBLE-BEE

ITS LIFE-HISTORY  
AND HOW TO DOMESTICATE IT

WITH  
DESCRIPTIONS OF ALL THE BRITISH SPECIES  
OF *BOMBUS* AND *PSITHYRUS*

BY

F. W. L. SLADEN

FELLOW OF THE ENTOMOLOGICAL SOCIETY OF LONDON  
AUTHOR OF 'QUEEN-BEARING IN ENGLAND'

*ILLUSTRATED WITH PHOTOGRAPHS AND DRAWINGS BY THE AUTHOR  
AND FIVE COLOURED PLATES PHOTOGRAPHED DIRECT  
FROM NATURE*

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1912

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## PREFACE

THE title, scheme, and some of the contents of this book are borrowed from a little treatise printed on a stencil copying apparatus in August 1892.

The boyish effort brought me several naturalist friends who encouraged me to pursue further the study of these intelligent and useful insects. Of these friends, I feel especially indebted to the late Edward Saunders, F.R.S., author of *The Hymenoptera Aculeata of the British Islands*, and to the late Mrs. Brightwen, the gentle writer of *Wild Nature Won by Kindness*, and other charming studies of pet animals.

The general outline of the life-history of the humble-bee is, of course, well known, but few observers have taken the trouble to investigate the details. Even Hoffer's extensive monograph, *Die Hummeln Steiermarks*, published in 1882 and 1883, makes no mention of many remarkable particulars that I have witnessed, and there can be no doubt that further investigations will reveal more.



An article entitled "*Bombi* in Captivity and Habits of *Psithyrus*" that appeared in the *Entomologist's Monthly Magazine* for October 1899, contained my original division of the species of *Bombus* into pollen-storers and pocket-makers, and gave accounts of the self-parasitism of certain species, and of the parasitism of *B. terrestris* upon *B. lucorum*.

Among matter now published for the first time are particulars of the Sladen wooden cover for artificial nests, and details of my humble-bee house. By the employment of the covers anybody may attract humble-bees to nest in his garden, and by obtaining a little wooden house and furnishing it as directed, one may study at leisure and in comfort all the details of their interesting and intelligent ways.

The study of humble-bees has hitherto been hampered by the difficulty, encountered even by experienced entomologists, in separating some of the species. It is hoped that the colour-photographs, used in conjunction with the descriptions given, will now remove this difficulty.

My thanks are due to Messrs. L. S. Crawshaw, J. W. Cunningham, Geo. Ellison, P. E. Freke, A. H. Hamm, W. H. Harwood, Rev. W. F. Johnson, Rev. F. D. Morice, Messrs. E. B. Nevinson, H. L. Orr, and Rupert Stenton for information kindly supplied about the distribution

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of the rarer species and varieties in different parts of the kingdom, and, in many cases, for the gift or loan of specimens.

I desire also to acknowledge the kind help of the officials of the British Museum and of the Irish National Museum in granting me every facility for examining specimens in these national collections.

F. W. L. SLADEN.

RIPPLE, DOVER,

*Feb. 5, 1912.*

