

**PROCEEDINGS OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON, VOL. VIII,
NOS. 1-2, MARCH-JUNE 1906**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649090471

Proceedings of the Entomological Society of Washington, Vol. VIII, Nos. 1-2, March-June 1906
by Entomological Society of Washington

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

ENTOMOLOGICAL SOCIETY OF WASHINGTON

**PROCEEDINGS OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON, VOL. VIII,
NOS. 1-2, MARCH-JUNE 1906**

PROCEEDINGS
OF THE
ENTOMOLOGICAL SOCIETY
OF
WASHINGTON.



Volume VIII. Nos. 1-2

MARCH-JUNE, 1906.

(Meetings of November 2, 1905, to January 18, 1906.)

Published Quarterly by the Society.
LANCASTER, PA. WASHINGTON, D. C.

1906

THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON.

ORGANIZED MARCH 12, 1884.

The regular meetings of the Society are held on the first Thursday in each month, from October to June, inclusive, at 8 P. M., at the residences of members.

Annual dues of active members, \$3.00; of corresponding members, \$2.00; initiation fee (for active members only), \$1.00. Remittances of dues should be made to the Treasurer.

OFFICERS FOR THE YEAR 1906.

<i>President</i>	NATHAN BANKS.
<i>First Vice-President</i>	A. D. HOPKINS.
<i>Second Vice-President</i>	O. HEIDEMANN.
<i>Recording Secretary</i>	ROLLA P. CURRIE.
<i>Corresponding Secretary</i>	E. S. G. TITUS.
<i>Treasurer</i>	J. D. PATTON.
<i>Representing the Society as a Vice-President of the Washington Academy of Sciences</i>	WM. H. ASHMEAD.

Executive Committee.

THE OFFICERS,		
HARRISON G. DYAR,	L. O. HOWARD,	C. L. MARLATT.

Publication Committee.

ROLLA P. CURRIE,	E. A. SCHWARZ,
E. S. G. TITUS,	WM. H. ASHMEAD,
O. HEIDEMANN,	AUG. BUSCK,
H. S. BARBER.	

PROCEEDINGS OF THE
ENTOMOLOGICAL SOCIETY OF WASHINGTON.

Published quarterly by the Society at 41 North Queen street, Lancaster, Pa., and Washington, D. C. Address all communications relating to the PROCEEDINGS to Rolla P. Currie, Chairman Publication Committee, care U. S. Dept. of Agriculture, Washington, D. C.; and all subscriptions and exchanges to the Corresponding Secretary, E. S. G. Titus, care U. S. Dept. of Agriculture, Washington, D. C. Terms for subscription, \$2.00 per annum; single numbers, 60 cents. *Remittances should be made payable to the Entomological Society of Washington.*

Authors of contributions to the PROCEEDINGS shall be entitled to 25 separates of each contribution, free of charge. Additional copies may be had at cost by notifying the Chairman of the Publication Committee before the page proof has been returned to the printer.

PROCEEDINGS
OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON

VOL. VIII.

MARCH-JUNE, 1906

Nos. 1-2.

NOVEMBER 2, 1905.

The 199th regular meeting was held at the residence of Dr. Ch. Wardell Stiles, 1412 Hopkins street, N. W., with the president, Mr. Banks, in the chair. The following were present: Messrs. Ashmead, Banks, Barber, Burke, Busck, Caudell, Dyar, Gill, Girault, Heidemann, Hopkins, Knab, Marlatt, Morris, Patten, Quaintance, Schwarz, Scott, Stiles, Titus, Ulke, Webb, and Webster, members, and Messrs. F. W. Goding, E. F. Phillips, and O. W. Barrett, visitors.

Doctor Stiles presented an explanation of the system of card catalogues in use in the laboratories of the U. S. Public Health and Marine Hospital Service, illustrating his remarks with the various types of cards used in the catalogues. Some general discussion regarding the system and also regarding the compilation of a list of all described genera of the world was participated in by members present.

—Doctor Ashmead spoke of a new and remarkable genus of Chalcididae, parasitic on mantid eggs, that had been recently received from Father Robert Brown, of Manila, P. I. He noted the fact that so many groups that have no spines on the thorax in our country are represented in the tropics by genera provided with spines.

—Mr. Caudell exhibited specimens of the various species of the true katydids (*Cyrtophylli*) from North America, comprising, in his opinion, three genera and six species. He had examined about 100 specimens and found many striking characters separating the species. In answer to a query regarding the

breeding habits, Mr. Caudell stated that the species, so far as known, live in trees, rarely forsaking the tops and then only, apparently, for the purpose of oviposition. One species has been found ovipositing at night in the bark of a tree near the ground. In one species of this group the female has the power of stridulation—something unknown for this sex in any other group of Orthoptera. Some considerable discussion regarding the ability or non-ability of the insects to fly took place. So far, there is no absolute case known of the insects flying, but some of the members believed that they do fly at times and probably at the mating period.

—Doctor Dyar exhibited the recently issued second volume of Packard's "Monograph of the Bombycine Moths of America North of Mexico," published as a memoir of the National Academy of Sciences. This volume was edited by Samuel Henshaw after Professor Packard's death and treats only of the Ceratocampidæ. A remarkable feature of the plates noted by Doctor Dyar is that all the larvæ are figured upside down. Larvæ in this group always cling to the underside of the twig or leaf upon which they are feeding.

—Doctor Gill made a few remarks on the present erroneous use by several authors of the termination oidea for families. Its well-established application as a termination for super-family groups should preclude the use for any other group.

[—Mr. Busck exhibited specimens of a peculiar large anthomyiid fly (*Mydæa pici* Macq.) which is parasitic on small birds in Santo Domingo, W. I. The eggs are laid on the young nestlings and the larva develops in a sac on the head or on the wing of the bird, which, when of small size, is sometimes curiously malformed by the large parasite. The species was described in 1853^a from a specimen bred from the wing of a young pigeon in Santo Domingo. The present specimens were bred from a young specimen of the small palm-chat, *Dulus dominicus* L., which was shot on September 8. The larva left the bird the same day, burrowed into earth provided for it in a box, and made a cocoon of particles of earth glued together by a glistening white excretion.

^aAnn. Soc. Ent. France, p. 659, Pl. xx, Fig. 11.

The fly issued on September 18. The species is evidently common, the number of small birds affected in that locality amounting to nearly 90 per cent, but the injury is not necessarily fatal and old birds often showed the shriveled up larval sac, indicating infestation in earlier life.

—Mr. Busck spoke also on the presence in Trinidad of the bot-fly that attacks human beings. He stated that many of the coolies are infested with these larvæ.

Mr. Barrett spoke of an experience he had had with this bot-fly while in Mexico, and has since furnished the following abstract of his remarks:

NOTES ON THE MAN-INFESTING BOT IN MEXICO.

By O. W. BARRETT.

[*Author's Abstract.*]

Regarding his experience with the so-called *Dermatobia hominis*, the writer would say that he personally knew of its wide occurrence in the Tuxtla district of Vera Cruz, Mexico, a locality about seventy-five miles southeast of the city of Vera Cruz; it was in the year 1897 when he visited that section and "took the notes."

There are at least three theories for the entrance of the larva beneath the skin. The one that seems most probable is that the newly-hatched grub can crawl some little distance before beginning to burrow. The first symptoms of the attack are intense itching and burning at the mouth of the burrow, which is greatly swollen and reddened. At about the second week of the existence of the larva inside the burrow sharp pains are felt as if nerves were being severed. At the second week, also, begins a slight exudation of serum. Attempts to dislocate the larva by physical means are unavailing on account of the retroverted setæ along the slender caudal portion of the insect. The burrow eventually becomes of some 10 to 20 millimeters in depth, with an opening of 1 to 2 millimeters. The larva is of a dead white color, with dark brown or blackish setæ.

Badly parasitized individuals are likely to suffer from the septic effects of larvæ crushed within the burrows, and of course the pain and worry have a bad psychological effect.

The smothering method of killing the larva is one of the most convenient and successful; fresh "chicle" (*Achras*

sapota gum) or court plaster is used. Cigarette ashes are sometimes worked into the larva sac but tend to increase the irritation and seldom kill the insect.

Mr. Titus mentioned that Mr. R. J. Crew, when collecting in British Guiana, found that he had one of these larvæ in the calf of his leg, but was unable to breed it out on account of the severe pain and probability of blood-poisoning following the attack. He had the larva removed after reaching his home in Canada. Mr. Knab noted that on his recent trip to Central America and Mexico he had seen several cases where the larva was present in human beings. Doctor Stiles stated that this species was known to occur in hogs, dogs, and monkeys on the Isthmus of Panama.

—Dr. F. W. Goding, U. S. Consul at Newcastle, New South Wales, was introduced and spoke several minutes on the entomological conditions in Australasia. He stated, among other things, that the museums in those colonies would be glad to send their specimens to this country and get them worked up.

—Doctor Hopkins then presented the following paper and exhibited specimens and work of several of the species treated:

**BARKBEETLE DEPREDACTIONS OF SOME FIFTY YEARS
AGO IN THE PIKES PEAK REGION OF
COLORADO.**

By A. D. HOPKINS, Ph.D.

In the course of my studies of forest insects in different sections of the Rocky Mountain region during the past six years, I have been specially interested in the frequent evidences of wide-spread depredations by barkbeetles, found on old, dead, and fallen timber. During investigations last month (October, 1905) in the Pikes Peak region of Colorado much additional evidence was found on old, dead, standing, and felled trees of the work of the Black Hills beetle (*Dendroctonus ponderosa* Hopk.) on pine, the spruce-destroying beetle (*D. piceaperda* Hopk.) on Engelmann spruce, and the Douglas spruce *Dendroctonus* (*D. pseudotsugæ* Hopk.) on Douglas spruce, indicating that all of these species have been present and destructive to living timber in this region for from thirty to fifty years. The number and distribution of such old beetle-marked trees indi-

cate that very extensive depredations have been wrought by these barkbeetles in the Pikes Peak region within the past century, and present conditions also indicate that a large per cent of the vast destruction of timber heretofore attributed to fire was primarily due to the work of these insects.

This was particularly striking on the southern slopes of Pikes Peak, at an altitude of about 10,000 feet, where nearly all of the timber had been killed some fifty years ago. In the fragmentary patches of living timber old felled trunks of a primitive matured forest of Engelmann spruce were found thickly covering the ground. On the weatherbeaten surface of these logs the characteristic markings of the galleries of *Dendroctonus piceaperda* were so common as to leave little doubt that the trees had been killed by a destructive invasion of this species—indeed quite conclusive evidence of this is found in the presence of dried resin in the grooves, which would not be found there if the trees had been attacked after they were dying from other causes.

This additional evidence, together with the known devastating work of this class of insects, makes it clear to me that there has been a most intimate interrelation of destructive barkbeetles and forest fires in the denudation of the vast areas of once heavily forested lands in the Rocky Mountain region, and that in very many cases the insects have first killed the timber, and the fire has then followed, leaving the charred trunks and logs as apparent proof that the fire alone was responsible.

DECEMBER 7, 1905.

The 200th regular meeting was held at the residence of Mr. C. L. Marlatt, 1440 Massachusetts avenue, N. W., the president, Mr. Banks, occupying the chair. The following persons were present: Messrs. Ashmead, Banks, Barber, Barrett, Burke, Busck, Casey, Caudell, Couden, Currie, Doolittle, Dyar, Fairchild, Fiske, Gill, Heidemann, Hopkins, Howard, Hunter, Knab, Marlatt, Patten, Piper, Quaintance, Schwarz, Stiles, Titus, Uhler, Webb, and Webster, members, and Messrs. Douglas H. Clemons, E. R. Sasser, George R. Stetson, and J. F. Strauss, visitors. The minutes of the November meeting were read and approved.

Three persons were elected to active membership, namely, Mr. Jasper M. Lawford, of 718 North Howard street, Balti-