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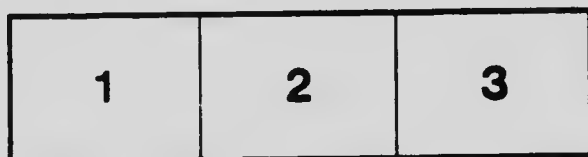
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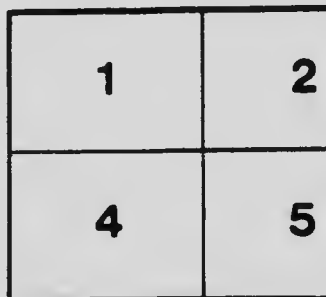
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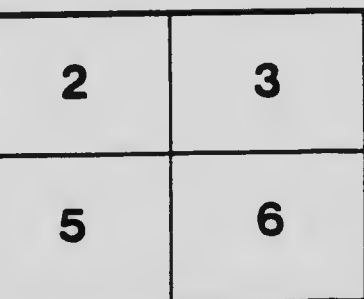
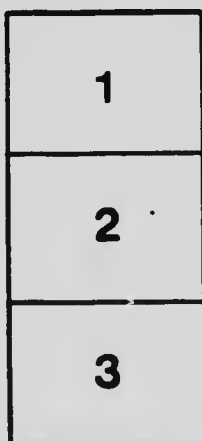
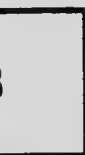
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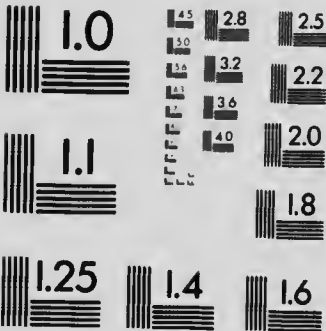
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REPORT
OF THE
CANADIAN ARCTIC EXPEDITION
1913-18

VOLUME III: INSECTS

INTRODUCTION

AND

LIST OF NEW GENERA AND SPECIES COLLECTED BY THE EXPEDITION

By C. GORDON HEWITT



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OTTAWA
THOMAS MULVEY
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1920

Issue 1 December 10, 1920

Report of the Canadian Arctic Expedition, 1913-18.

VOLUME III: INSECTS.

- INTRODUCTION. By C. Gordon Hewitt. *Issued 1920).*
- Part A: COLLEMBOLA. By Justus W. Tolson. *Issued July 10, 1919).*
- Part B: NEUROPTEROID INSECTS. By Nathan Banks. *Issued July 11, 1919).*
- Part C: DIPTERA.
Craneflies. By Charles P. Alexander.
Mosquitoes. By Harrison G. Dyar.
Diptera (excluding Tipulidae and Culicidae). By J. R. Malloch. *Issued July 14, 1919).*
- Part D: MALLOPHAGA AND ANOPLURA
Mallophaga. By A. W. Baker
Anoplura. By G. E. Ferris and G. H. F. Nuttall. *Issued September 17, 1919).*
- Part E: COLEOPTERA.
Forest Insects, including Ipidae, Cerambycidae, and Buprestidae. By J. M. Swaine,
Carabidae and Silphidae. By H. C. Fall
Coccinellidae, Elateridae, Chrysomelidae, and Rhynchophora (excluding Ipidae).
By C. W. Leong.
Dytiscidae. By J. D. Sherman, Jr. *Issued December 12, 1919).*
- Part F: HEMIPTERA. By Edward P. Van Duzee. *Issued July 11, 1919).*
- Part G: HYMENOPTERA AND PLANT GALLS.
Sawflies. (Tenthredinoidea). By Alex. D. MacGillivray
Parasitic Hymenoptera. By Charles T. Brues.
Wasps and Bees. By F. W. L. Staden.
Plant Galls. By E. Porter Felt. *Issued November 5, 1919).*
- Part H: SPIDERS, MITES, AND MYRIAPODS.
Spiders. By J. H. Emerton.
Mites. By Nathan Banks.
Myriapods. By Ralph V. Chamberlin. *Issued July 11, 1919).*
- Part I: LEPIDOPTERA. By Arthur Gibson. *Issued January 10, 1920).*
- Part J: ORTHOPTERA. By L. M. Walker. *Issued September 7, 1920).*
- Part K: GENERAL OBSERVATIONS ON INSECT LIFE IN THE
ARCTIC. By Fritz Jonasson. *(In preparation)*

REPORT
OF THE
CANADIAN ARCTIC EXPEDITION
1913-18

VOLUME III. INSECTS

INTRODUCTION

AND

LIST OF NEW GENERA AND SPECIES COLLECTED BY THE EXPEDITION

By C. GORDON HEWITT

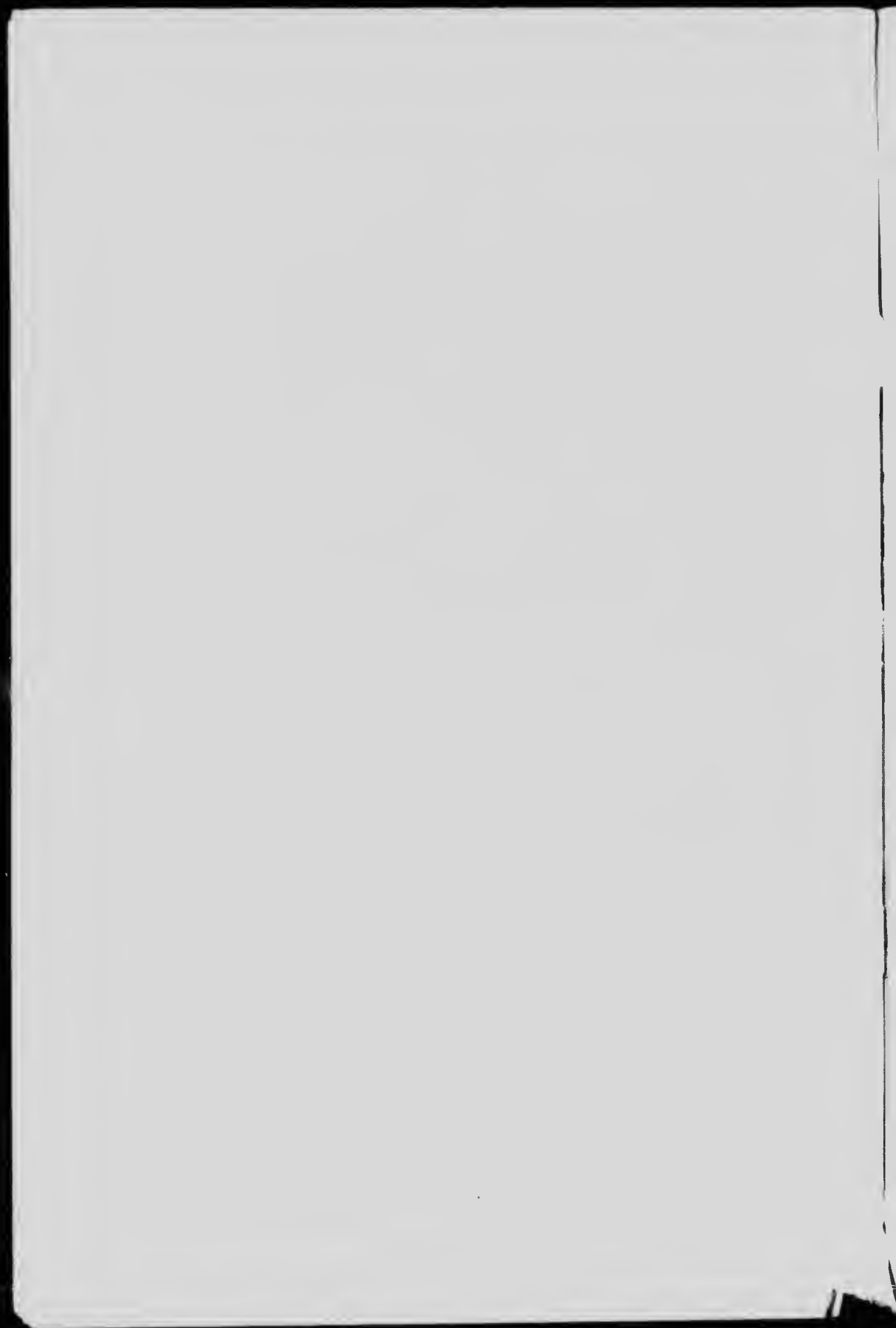


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INTRODUCTION.





INTRODUCTION.

Our knowledge of the insect fauna of northern and arctic Canada has hitherto been so meagre, and our collections so lacking in material from that region that the invitation given me in 1913 by the Deputy Minister of Mines to prepare a memorandum of instructions concerning the collection of insects by the Canadian Arctic Expedition which was then being organized was more than welcome, and high hopes were entertained that a rich harvest would result. The sad and untimely death of Mr. James Murray, the marine biologist of the expedition, following the loss of the *Kartak*, placed upon the shoulders of Mr. Frits Johansen, to whom the entomological work had been assigned, a double burden and increased duties and he became responsible for the marine biology in addition to his botanical and entomological work. The large collections of marine and other invertebrates, fishes, and plants testify as to the assiduity with which Mr. Johansen collected. But, as was inevitable the number of insects collected was less than we had originally hoped to receive. Nevertheless, the collection of insects brought back by the expedition was a very representative one, and, as the succeeding reports will show, it has been the means of adding valuable information to our knowledge of the insects of the northern regions of this continent. No less than 8 new genera, 93 new species and 5 new subspecies and varieties have been described in the following pages. In addition, as a result of Mr. Johansen's keen desire to obtain notes on the life-histories and bionomics of these northern forms and the investigations that he carried on under the difficult conditions incident to such work in the north, he has been able to add much to our knowledge of northern insect life, and his notes will be found scattered through the reports in the different orders and families. Mr. Johansen's report on the insect life of the arctic will be read with interest in conjunction with the other reports, since it gives a picture of the conditions under which the insects were found; too often entomologists lose sight of the ecological aspect of an insect fauna, and reports become mere systematic catalogues and lifeless. The abundance and variety of the arctic and sub-arctic insect life will be surprising perhaps to many entomologists who have not hitherto appreciated the burst of plant and insect life that takes place during the short arctic summer when the land is clothed with vegetation and flowers which are visited by innumerable bumble bees, moths and butterflies and other sun-loving insects, enjoying the brief spell of existence that release from the gelid land and water permits.

We desire to express our warm appreciation of the assistance so willingly rendered by the authors whose names appear on the different reports in this volume in working up this interesting collection of the insects of the arctic and sub-arctic region of North America, and we hope that this volume may stimulate further investigation of a fauna of interest alike to the systematist and to those who are interested in the broader question of the distribution of animal life.

C. GORDON HEWITT,

Dominion Entomologist.

OTTAWA, January, 1920.

LIST OF NEW GENERA AND SPECIES COLLECTED BY THE EXPEDITION

By C. Gordon Hewitt

List of New Genera and New Species of Insects, Arachnids and Myriapods collected by the Canadian Arctic Expedition, 1913-18.

Part A. COLLEMBOLA.

New Genera.	Page	New Species.	Page
		<i>Actinotus ovalis</i> Folsom	5A
		<i>Duobiusa strobilimorphica</i> Folsom	6A
		<i>Ectopoda incomparata</i> Folsom	13A

Part B. NEUROPTEROID INSECTS.

<i>Capra maritima</i> Banks	3B
<i>Anulaba emarginata</i> Banks.	4B

Part C. DIPTERA.

<i>Deucalionia alaskensis</i> Alexander	4c
<i>Euxophora nigripalpis</i> Alexander	5c
<i>Lamprophala phaeopteralis</i> Alexander	6c
<i>Tetraption borealis</i> Alexander	6c
<i>Tetraption frigidum</i> Alexander	7c
<i>Stegoraphe parvula</i> Alexander	7c
<i>Arphidictyna arctica</i> Alexander	10c
<i>Tipula jakobsoni</i> Alexander	11c
" <i>deplana</i> Alexander	12c
" <i>bicolor</i> Alexander	14c
" <i>subpolaris</i> Alexander	14c
" <i>besselsophis</i> Alexander	15c
" <i>subarctica</i> Alexander	15c
<i>Achis neoreticus</i> Dyar	32c
<i>Tanypus alaskensis</i> Malloch	35c
<i>Drosisa arctica</i> Malloch	37c
<i>Prosimulium borealis</i> Malloch	41c
<i>Simulium simile</i> Malloch	42c
<i>Rhamphomyia craticuloides</i> Malloch	45c
" <i>rossi</i> Malloch	46c
" <i>simulata</i> Malloch	46c
" <i>herschelli</i> Malloch	47c
" <i>conseruatora</i> Malloch	48c
<i>Dolichopus dasyops</i> Malloch	49c
<i>Hyalophorus polaris</i> Malloch	51c
<i>Aphidictyna alaskensis</i> Malloch	52c
" <i>platyclera</i> Malloch	52c
<i>Lophocera transversalis</i> Malloch	53c
<i>Sarphus solalis</i> var. <i>interceptus</i> Malloch	57c
<i>Peleteria arctica</i> Malloch	57c
<i>Pharmia carolina</i> Malloch	59c
<i>Platypoda minima</i> Malloch	61c
" <i>imilatri</i> Malloch	61c
<i>Mydina obscura</i> Malloch	62c
<i>Arctia borealis</i> Malloch	64c
<i>Pogonomiia quadrata</i> Malloch	66c
<i>Pogonomioides atropa</i> Malloch	67c
<i>Hyalophorus arctica</i> Malloch	69c
<i>Allopsis obesa</i> Malloch	70c
<i>Halempia acerastetalis</i> Malloch	72c
<i>Phorbia brevicornis</i> Malloch	73c
<i>Gnathypus atrovirens</i> Malloch	77c
<i>Cordylurella sabrotata</i> Malloch	78c
<i>Dasypteron tibialis</i> Malloch	79c
<i>Allomyia unguiculata</i> Malloch	80c
<i>Oecotheca aristata</i> Malloch	82c
<i>Nesleria rotundi</i> Davis Malloch	83c
<i>Prophila borealis</i> Malloch	84c

Mydacia Malloch
Pogonomioides Malloch
Cordylurella Malloch
Dasypteron Malloch
Allomyia Malloch
Nesleria Malloch

62c
 67c
 78c
 79c
 80c
 83c

Canadian Arctic Expedition, 1913-18.

Part E. COLEOPTERA.

New Genera.	Page.	New Species.	Page.
		<i>Dendroctonus johanseni</i> Swaine	5E
		<i>Carphoborus andersoni</i> Swaine.	6E
		<i>Callidium subopacum</i> Swaine.	12E
		<i>Trichalophas stefanssoni</i> Leng.	20E

Part F. HEMIPTERA.

<i>Euscelis hyperboreus</i> Van Duzee	4F
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Part G. HYMENOPTERA AND PLANT GALLS.

<i>Rhogogastera reliqua</i> MacGillivray	4G
<i>Eura abortiva</i> MacGillivray	4G
" <i>arctica</i> MacGillivray	5G
<i>Pontania atrata</i> MacGillivray	6G
" <i>lorata</i> MacGillivray	8G
" <i>delicatula</i> MacGillivray	8G
" <i>deminuta</i> MacGillivray	9G
" <i>quadrifasciata</i> MacGillivray	10G
" <i>subpallida</i> MacGillivray	11G
" <i>trifasciata</i> MacGillivray	11G
<i>Anaaurummatius completus</i> MacGillivray	13G
" <i>indicatus</i> MacGillivray	14G
" <i>digestus</i> MacGillivray	14G
" <i>cogitatus</i> MacGillivray	15G
" <i>varianus</i> MacGillivray	16G
" <i>aulatus</i> MacGillivray	16G
" <i>magnus</i> MacGillivray	17G
<i>Aptesis nivarius</i> Brues	21G
<i>Polyblastus arcticus</i> Brues	22G
<i>Diocles molestus</i> Brues	23G
<i>Bombus neoboreus</i> Sladen	28G
<i>Bombus sylvicola</i> var. <i>johanseni</i> Sladen.	30G

Part H. SPIDERS, MITES AND MYRIAPODS.

Spiders		<i>Tmeticus alatus</i> Emerton	3H
		<i>Microneta maritima</i> Emerton	4H
		<i>Lycosa asiavak</i> Emerton	5H
		<i>Stigmaeus arcticus</i> Banks	11H
Mites.			
Myriapods		<i>Cryophilus alaskanus</i> Chamberlin	18H
<i>Cryophilus</i> Chamberlin	17H	<i>Ethopolys integer</i> Chamberlin	20H
		<i>Ethopolys integer</i> subsp. <i>alaskanus</i> Chamberlin	I

Part I. LEPIDOPTERA.

<i>Parrabarrovia</i> Gibson	33 I	<i>Oeneis semidea</i> var. <i>arctica</i> Gibson	13I
		" <i>simulans</i> Gibson	14I
		" <i>cairnesi</i> Gibson	15I
		" <i>brucei</i> var. <i>yukonensis</i> Gibson	21I
		<i>Brenthis natazhati</i> Gibson	21I
		" <i>distincta</i> Gibson	25I
		<i>Parabarrovia keelei</i> Gibson	33I
		<i>Anarta subfumosa</i> Gibson	34I
		<i>Homoglaea murrayi</i> Gibson	36I
		<i>Diasema alaskalis</i> Gibson	45I
		<i>Pyla aretiella</i> Gibson	46I

SUMMARY.

Part	Order	New Gen.	New Sp.	New Subsp.	New Var.
A.	Collembola		3		
B.	Neuropteroids		2		
C.	Diptera	6	47		1
D.	Mallophaga and Anoplura		4		
E.	Coleoptera		1		
F.	Hemiptera		21		1
G.	Hymenoptera		3		
H.	Spiders, Mites and Myriopods		1		
	Spiders		3		
	Mites		1		
	Myriopods		2		
I.	Lepidoptera	1	9	1	
J.	Orthoptera	1			2
	Totals	8	93	1	4

ALG. 12-1



Volume I: General Introduction, Narrative, Etc.

- Part A: Northern Party, 1913-18.
- Part B: Southern Party, 1913-16. By Rudolph Martin Anderson. (*In preparation*).

Volume II: Mammals and Birds.

- Part A: Mammals. By Rudolph Martin Anderson. (*In preparation*).
- Part B: Birds. By R. M. Anderson and P. A. Taverner. (*In preparation*).

Volume III: Insects.

- Introduction. By C. Gordon Hewitt. (*In press*).
- Part A: Collembola. By Justus W. Folsom. (*Issued*).
- Part B: Neuropteroid Insects. By Nathan Banks. (*Issued*).
- Part C: Diptera. By Chas. W. Alexander, Harrison G. Lyar, and J. R. Malloch. (*Issued*).
- Part D: Mallophaga and Anoplura. By A. W. Baker, G. I. Ferris, and G. H. F. Nattall. (*Issued*).
- Part E: Coleoptera. By J. M. Swaine, H. C. Fall, C. W. Long, and I. D. Sherman, Jr. (*Issued*).
- Part F: Hemiptera. By E. P. Van Duzee. (*Issued*).
- Part G: Hymenoptera and Plant Galls. By Alex. D. MacGillivray, Charles T. Brues, F. W. L. Sladen, and E. Porter Felt. (*Issued*).
- Part H: Spiders, Mites, and Myriapods. By J. H. Emerton, Nathan Banks, and Ralph V. Chamberlin (*Issued*).
- Part I: Lepidoptera. By Arthur Gibson. (*Issued*).
- Part J: Orthoptera. By E. M. Walker. (*Issued*).
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