

Monograph



ZOOTAXA



Checklist of the spiders (Araneae) of Canada and Alaska

PIERRE PAQUIN^{1,5,6} DONALD J. BUCKLE², NADINE DUPÉRRÉ³ & CHARLES D. DONDALE⁴

¹Cave and Endangered Invertebrate Research Laboratory, SWCA Environmental Consultants, 4407 Monterey Oaks Boulevard, Building 1, Suite 110, Austin, Texas 78749, U.S.A. E-mail: ppaquin@swca.com.

²2620 Albert Avenue, Saskatoon, SK, S7N 1G7, Canada. Email: djbuckle@shaw.ca.

³Division of Invertebrate Zoology, American Museum of Natural History, Central Park West at 79th Street, New York New York 10024, U.S.A. E-mail: nduperre@amnh.org

⁴Biodiversity, Research Branch, Agriculture & Agri-Food Canada, 960 Carling Avenue, Ottawa K1A 0C6 (Ontario), Canada. E-mail: cjdondale@horizontech.ca

⁵Corresponding author

⁶This is publication no. 21 of the Karst Biosciences and Environmental Geophysics Research Laboratories, SWCA Environmental Consultants



PIERRE PAQUIN, DONALD J. BUCKLE, NADINE DUPÉRRÉ & CHARLES D. DONDALE Checklist of the spiders (Araneae) of Canada and Alaska

(*Zootaxa* 2461)

170 pp.; 30 cm.

14 May 2010

ISBN 978-1-86977-533-9 (paperback)

ISBN 978-1-86977-534-6 (Online edition)

FIRST PUBLISHED IN 2010 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

http://www.mapress.com/zootaxa/

© 2010 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Table of contents

Abstract	. 3
Introduction	. 3
Organization of the list	.3
Data Sources	.7
Taxonomy	.7
Acknowledgements	
Checklist	. 8
Literature cited	95
Index	28

Abstract

This checklist records the occurrence of 1413 species of spiders (Araneae) in 43 families in Canada and Alaska. Distributions of species are given by state, territory and province. Each species name is presented in its original combination, followed by primary synonyms, if any. The list is dominated by members of the family Linyphiidae (39.5% of total species). Highest numbers of species are recorded for Ontario (746), British Columbia (700) and Québec (677). We record 69 species that are thought to be introduced from elsewhere and 321 that are known in the Palaearctic.

Key words: Canada, Alaska, spiders, fauna, checklist

Introduction

Canada and Alaska occupy more than half the land area of the North American continent (Fig. 1). Together they span vast regions of arctic tundra, boreal forest, prairie and deciduous forest. The Rocky Mountains and Appalachian Mountains form enormous heights and valleys in a north-south orientation (Danks 1979). Special habitats are found in areas thought to have remained ice-free during the Pleistocene, notably Beringia. Such landscape diversity has produced a comparable diversity of spider taxa.

Exploration of the Canadian and Alaskan spider fauna began with the collection and identification of specimens from a few scattered localities by European arachnologists such as Blackwall (1846a, 1871), Sutherland (1852), Thorell (1875d) and O. Pickard-Cambridge (1881b). New England workers followed with more systematic collecting: Marx (1892a, b), Emerton (1894, 1915b, 1917a, 1919a,b, 1920, 1923, 1925a, 1926); Banks (1906b), Chamberlin (1921c), Crosby & Zorsch (1935), Bishop (1949) and Levi & Levi (1955). A few Europeans continued the work: Jackson (1933), Holm (1960b), Koponen (1992a, 1994) and Saaristo and Koponen (1998). Canadians have contributed a few works: Kurata (1944) and Leech (1966). Since the year 2000, Québec workers have made remarkable progress in making known the spider fauna of that province: Paquin & LeSage (2001), Paquin & Dupérré (2003, 2006) and Paquin et al. (2001, 2008e, f). State, territorial or provincial lists are available for Alaska (Chamberlin & Ivie 1947b), Yukon Territory (Dondale et al. 1997), British Columbia (West et al. 1984, 1988; Bennett et al. 2006), Manitoba (Aitchison-Benell & Dondale 1992), Québec (Bélanger & Hutchinson 1992; Paquin & Dupérré 2003, 2006; Paquin et al. 2001, 2008c) and Newfoundland (Hackman 1954; Pickavance & Dondale 2005). The sole published list for Canada as a whole is the early one by Emerton (1920), who recorded 342 species. Sixty years later, Dondale (1979a) estimated a total of 1246 species. Bennett (1999) suggested a total of 1400 species. The present list contains 1413 species for Canada and Alaska (Table 1), a number that might represent 80% of the actual total.

Organization of the list

The format used in this checklist follows that of Bousquet's (1991) Checklist of Beetles of Canada and Alaska.