ECTOPARASITES OF CANADIAN BIRDS AND MAMMALS

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A small collection of ectoparasites from birds and mammals is listed with comments relative to host relationships and distribution in Canada. Important past references to each species in Canada are reviewed briefly. Eighteen species belonging to 7 orders are listed from 13 species of birds and mammals. Eight of these are new Canadian, provincial and/or host records.

Specimens have been distributed between Joseph Moore Museum, Earlham College, Richmond, Indiana and Bernard P. Bishop Museum. Thanks are extended to Mr. W. W. Baker, Dr. R. E. Mumford and Mrs. C. L. Ward for providing most of the material for study.

List of Ectoparasites

Class Acarina

Order Mesostigmata

Family Ixodidae

Haemaphysalis leporispalustris (Packard)


This is the tick encountered most often on leporids in North America. Gregson (1956) tabulated many records from Canada including four from New Brunswick.

Ixodes angustus Neumann

1 ♀, ex Tamias striatus (Linnaeus), Ontario, Tuscola, 64 km N. 28.VII.1965, J. B. Cape (JBC 581).

According to Gregson (1956) this species is best known from the western provinces but is found throughout Canada. He listed it from this host in Ontario.

Order Mesostigmata

Family Haemogamasidae

Eubeliceps stabularis (Koch)

1 ♀, ex Sorex cinereus Kerr, Saskatchewan, Regina, 3 km SE. 28.VII.1959, N. Wilcox (E 1136); 1 ♂, ex Micrurus pennaphisicus (Ord.), Saskatchewan, Regina, 3 km SE. 28.VII.1959, N. Wilson (E 1197).

E. stabularis is a widespread species recorded mostly from rodents and invertebrates. This is the first record from Saskatchewan and from S. cinereus. All previous Canadian records are from Ontario (Buika, 1969; Jameson, 1950; Judd, 1950).

Haemogamusus ambulans (Thorell)

1 ♀, ex Entomobius minimus (Buchman), Ontario, Chapleau, 32 km E. VII.1965, W. H. Daden and J. B. Cape.

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This species is known from the northern United States, Canada and Alaska under the name Haemogamus alaskensis Essig. Redeets and insectivores are the common hosts. It never has been reported from E. minimus but there are records from Ontario (Jameson, 1950; Keegan, 1951). The record of Haemogamus hirundus Berlese from Ontario by Judd (1905) may be this species.

**Family Laelapidae**

*Androlaelaps fahrenholzi* (Berlese)

1 N, ex *Microtus pennsylvanicus*, Saskatchewan, Regina, 3 km SE, 28.VIII.1959, N. Wilson (E 1137).

This is a widespread species occurring most frequently on rodents. It has been recorded from Canada by Strausnann (1949), Jameson (1950), Judd (1905, 1953) and Schotten et al. (1962), but never from Saskatchewan.

*Laelaps alaskensis* Gunst


This rodent mite has been reported from Kewatin and Elles Ringos Island in Canada (Harper, 1956; McAlpine, 1964; 1990). Records of *Laeleps muris* (Levich) from Ontario by Judd (1905; 1953; 1904) are probably this species.

**Order Prostigmata**

*Family Trombiculidae*

*Eschscholtzia sp.*

40 LL, ex *Microtus pennsylvanicus*, Saskatchewan, Regina, 3 km SE, 27.VIII.1959, N. Wilson (E 1135).

All specimens lack sensilla making specific identification impossible. They are very close to *E. canum* Brown and Brennan and *E. schultzi* (Koettlitz) both of which have been collected in Canada (Brown and Brennan, 1902; Farrell, 1956).

**Class Insecta**

**Order Anoplura**

*Hoplolaelaps acanthus* (Burmester)

1 ♂, 2 ♀♂, ex *Microtus pennsylvanicus*, Saskatchewan, Regina, 3 km SE, 28.VIII.1959, N. Wilson (E 1137).

*H. acanthus* is a common ectoparasite of voles in North America and has been reported previously from Canada (Perrin, 1921; Harper, 1956; Schotten et al., 1962; McAlpine, 1904, 1965; Spencer, 1969).

**Order Mallophaga**

*Family Menoponidae*

*Mysida angola* (Nitzsch)


Neither Spencer (1948, 1957), Stirrett (1952) nor Whitehead (1954) listed this species from Canada; however, it is to be expected on the common raven.

**Family Psoroptidae**

*Psoroptes squamulatus* (Linnaeus)

1 ♀, ex *Anas carolinensis* Gmelin, Manitoba, Delta, 13.VIII.1964, D. A. Muszynski.

This mite harbors on several species of ducks and has been collected from this locality on this host (Busch, 1965). There are other Canadian records from British Columbia (Spencer, 1948), Ontario (Stirrett, 1952) and Quebec (Whitehead, 1954).

**Family Philopteridae**

*Sacculundra sterna* (Linnaeus)

1 ♀, ex *Sturnus hirundinaceus* Linnaeus, Manitoba, Delta, 13.VIII.1964, D. A. Muszynski (REM 4301).

This species is expected to occur wherever the common tern does, although apparently it has not been collected in Canada.

**Order Siphonaptera**

*Family Ceratophyllidae*

*Megalothiris atro* (Jordan)


Holland (1949) mentioned only two records of this species; that of Jordan's from Alberta and a new one from Northwest Territories. The above record extends the range about 2,300 km eastward in Canada. The few collections indicate this flea is a parasite of weasels.

Three of four specimens varied from the original description in that they had fewer pronotal spines (23, 23, 24). Jordan (1925) indicated there were 25 to 26 spines in the pronotal cephalium of his specimens which suggested to him that it might be a bird flea.

*Megalothiris quadrini* (Rothschild)


This flea is normally a parasite of cricetid rodents and the present records may reflect predation by weasels on these rodents. This is a widespread species in Canada and Holland (1949) listed several records from Ontario.

**Monopsyllus cumolus* cumolus* (Rothschild)

1 ♀, ex *Eutamias minimus*, Ontario, Euchel, 32 km E, 7.VII.1965, W. H. Buskirk and J. B. Cope.

This chipmunk flea probably occurs throughout the range of *Eutamias* in Canada. Holland (1949) and Hubbard (1950) each reported three records from Ontario.

**Monopsyllus vison* (Baker)


This species is widespread in Canada with *Tamiasciurus hudsonicus* (Erxleben) the true host. The specimen from man probably was acquired while handling
mammals and those from a weasel reflect the predatory nature of this animal. Holland (1949), Hubbard (1949) and Scholten et al. (1962) listed several records from southern Ontario.

Orcopetes caecus dorus (Jordan)

2♀♂, 1♀, ex M. lancasteri, Ontario, Moosonee, 14.VII.1965, W. H. Buskirk (B).

The subspecies dorus has a widespread but discontinuous distribution in Canada. Its true host is T. hudsonicus and the above record probably indicates predation by the weasel on red squirrels. There are several records of this species from Ontario (Holland, 1949; Judd, 1954; Scholten et al., 1962).

Family Ichneumonidae

Myodopylla insignis (Rothschild)

1♂, 1♀, ex M. loticola (Le Conte), New Brunswick, Charlotte Co., Kent L., 17.VII.1965, I. L. Bristow (F N 54).

M. insignis is widely distributed in Canada from inland British Columbia to New Brunswick, from which latter province the above record is the first. Bats of the genus Myotis, especially M. loticola, are recorded most frequently as hosts.

Oreot Drifter

Family Ichneumonidae

Orihamochara fringillina (Curtis)


This is a common ichneumonid of certain species of passerine birds in temperate North America and there are numerous records from Canada, including Ontario, (Bequaert, 1954; Davies, 1958; Bennett, 1961). The fox sparrow apparently is not one of the preferred hosts as Bequaert (1954) published only one verified record.

References


Strandmann, B. W. 1949. The blood-sucking nites of the genus Haemoloe-
