## NORTH AMERICAN BEETLES INFESTING MAMMALS

G. J. Spencer

University of British Columbia

In Leng's Catalogue of the Coleoptera of North America, the superfamily Staphylinoidea starts with three small families listed just before the Silphidae, namely: the Platypsyllidae, the Brathinidae, and the Leptinidae. The Brathinidae as far as known, occur in leaf mould; the other two families are ectoparasites on rodents.

In 1949 Mr. George Hopping published a short article in the Proceedings of our Society, Vol. 45, discussing some of these beetles and emphasizing the fact that four of the five species recorded from North America, are in the collection of the University of British Columbia. In September 1955, in the Annals of the Entomological Society of America appeared an article by Messrs. James R. Parks and John W. Barnes, titled "Notes on the Family Leptinidae including a new record of Leptinellus validus (Horn.) in North America (Coleoptera)" in which is mentioned Platypsyllus castoris together with a full discussion of the known species in the family and the approximate numbers in the collections of North American institutions.

To enlarge upon G. Hopping's article and to add a little to that of Parks and Barnes, I submit the following records of these three families which are represented in the University collections I have built up during the last 30 years.

The **Platypsyllidae** contains only one species, *Platypsyllus castoris* Ritsema, about 2 to 2.5 mm. long, found only on beaver and probably agreeing with the world distribution of that animal. Our records include:

One, on a point, labelled "C. W. Leng collection." Dakota, no date.

Three, on points, collected by R. Cliffe at Courtenay, B.C., 13 Jan. 1947.

Two, on points, collected by L. G. Sugden at Courtenay, B.C., 24 Sept. 1949.

Thirteen, on points, collected by G. J. Spencer at Courtenay, B.C., 13 March 1953.

Nineteen, in alcohol, Courtenay, 26 June 1949, from kit beaver with 8 larvae from the same animal. From L. G. Sugden.

Of the family **Brathinidae**, with three species recorded from North America, we have one specimen 3.3 mm. long, *Brathinus varicornis* Lec. labelled "Framingham, Mass. 11 Nov. 1939. C. A. Frost coll. sifting." This specimen is probably a gift from G. Hopping contributed at the time he arranged our beetle collection in 1946/47.

Of the family Leptinidae, Parks and Barnes give the world distribution of all known species. In 1866 Leconte named a North American beetle Leptinus americanus. Later this species was synonymized with a European form, L. testaceus Müller, 1817, which was considered to be holarctic. In 1948 Werner and Edwards removed americanus from synonomy with testaceus and established it as a valid Nearctic species (Parks and Barnes, loc. cit.). Although G. Hopping recorded our material as testaceus, it is in fact The family Leptinidae americanus. according to Parks and Barnes, contains only six valid species named so far; one Palearctic, one in Russia, one in Algeria and three in North America; we have all three North American species. Our records of L. americanus include :

One, on a slide, collected by J. D. Gregson at Silver Creek, Fraser Valley, B.C., 26 April 1940, from *Sorex* sp.

One, on a point, collected by G. J. Spencer at the University campus, 24 March 1945 from *Microtus serpens*, Merr.

One, on a point, collected by a student at 4200 ft., Silverhill mine, Tulameen, B.C., 12 Aug. 1955, from Sorex sp. This man, a student taking his doctorate in wild life management at this University, told me that the beetle was common on a number of small rodents that he had trapped in 1955, but since he was interested only in fleas, lice and ticks he discarded He is working in the the beetles. same territory this summer, 1956, and has promised to keep for me all that he collects. This species is supposed to be a nest inhabitant, but all our specimens have been taken from the fur of their hosts.

The main beaver parasite in this Province seems to be *Leptinellus validus* (Horn) or a species so labelled by G. Hopping. All our specimens are from 4 to 4.2 mm. long. Resembling young cockroaches in shape, they are in that respect like other members of this family, although not so flat. They are much darker coloured. The elytra are tightly locked together, or fused on the meson. In general they agree with Park's and Barnes' description, quoted from Jeannel, 1922. Records include:

One, on a point, collected with seven larvae at Lempriere, B.C., 15 May 1944, by O. French.

Twenty-one, on points, collected by Game Warden E. Holmes at Bowron Lakes, 10 Sept. 1949.

Forty-five, in alcohol, same date, place and collector, making 67 specimens of this species.

Finally, the third North American species Leptinus (Leptinellus) aplodontiae Ferris 1918, is specific to the mountain beaver Aplodontia sp. Our record is:

Four specimens on one slide, 2 males and 2 females, collection by Dr. C. Andresen Hubbard at Fort Dick, California, 8 Aug. 1943 from *Aplodontia pacifica*.

## SOME RECORDS OF CERCERIDAE FROM BRITISH COLUMBIA (SPHECOIDEA : HYMENOPTERA)

## G. J. SPENCER

## Department of Zoology, University of British Columbia

Continuing the task of getting named the insects of this Province, which I have collected for the University over the years, I assembled the sphecoid wasps Cerceridae and sent them to Professor Emeritus Herman A. Scullen of Oregon State College who had volunteered to name I am deeply indebted to Prothem. fessor Scullen who not only named and returned my collection in short order, retaining only one specimen for further study, but even added a male and female each, of three species which we did not have. Such generosity on the part of a systematist is indeed exceptional and merits special mention and thanks which are herewith gratefully extended.

Most writers on the Hymenoptera and authors of text books place these wasps in the Family Cerceridae of the superfamily Sphecoidea: the Synoptic Catalogue of the Hymenoptera of America North of Mexico by Muesbeck, Krombein, Townes *et al*, places them in the Superfamily Sphecoidea, Family Sphecidae, Sub-Family Philanthinae, Tribe Cercerini. I have used the older nomenclature.

These small black and yellow, hardbodies wasps are apparently not well represented in this Province. Whenever I encountered them in the course of some 28 years general collecting, I always captured them, but the collection contains only 83 specimens of four species, all but five of my own