



comprises 132 specimens, representing 16 species. In addition there are five specimens from Vancouver Island collected by Dr. Dyar, representing four species not included in those from the Kootenay country, namely, *Lestes congener*, *Æschna constricta*, *Sympetrum costiferum* and *S. vicinum*.

While at Banff, Alberta, the writer took an undetermined ♀ of *Æschna*; and Mr. N. B. Sanson, Curator of the Park Museum at Banff, subsequently sent him for determination three specimens of *Sympetrum scoticum*, a species which in all probability occurs in portions of British Columbia.

The most abundant species in the Kootenay District appear to be *Lestes forcipatus*, *Enallagma cyathigerum*, *Cordulia shurtleffi*, *Leucorhinia proxima*, *Sympetrum corruptum* and *Libellula quadrimaculata*.

The writer is indebted to Dr. Philip P. Calvert for kind assistance in naming some of the species of *Sympetrum* and for verifying the determinations of *Leucorhinia*.

[*Lestes congener* Hagen.

We did not find this species in the Kootenay District, but Dr. Dyar collected a single ♂ at Wellington, on Vancouver Island, September 2.]

*Lestes uncatus* Kirby.

Kaslo, August 5 (1 ♂, 1 ♀), August 7 (1 ♀).

*Lestes forcipatus* Rambur.

Kaslo, July 9 (3 ♂♂, 6 ♀♀)—all somewhat teneral; Mirror Lake, Kaslo, August 6 (1 ♀).

One of the ♂♂ is remarkable for its extremely short abdomen—measuring only 20.5 mm., the same length as the hind wing.

*Enallagma yathigerum* Charpentier.

“Lilypad Lake,” Kaslo, June 7 (Dyar: 2 ♂♂, teneral); June 10 (5 ♂♂, 2 of them teneral), June 26 (2 ♂♂), July 2 (3 ♂♂, 2 of them teneral), July 9 (5 ♂♂); Mirror Lake, Kaslo, August 6 (3 ♂♂, 1 pair *in coitu*); Loon Lake, Ainsworth, July 11 (1 ♂); Bear Lake, July 20 (5 ♂♂).

*Enallagma* sp.

“Lilypad Lake,” Kaslo, May 29 (Dyar: 1 ♀); Mirror Lake, Kaslo, July 7 (1 ♀), August 6 (2 ♀♀); Loon Lake, Ainsworth, July 11 (1 ♀).

These specimens belong either to *cyathigerum* or *calverti*, but as no character for separating the ♀♀ of these two species has yet been discovered they cannot now be determined specifically.

**Enallagma calverti** Morse.

Mirror Lake, Kaslo, August 6 (3 ♂♂); Loon Lake, Ainsworth, July 11 (1 ♂, 1 pair *in coitu*).

**Enallagma carunculatum** Morse.

Mirror Lake, Kaslo, July 17 (1 ♀), August 6 (6 ♂♂, 1 pair *in coitu*, 1 ♀).

**Ischnura cervula** Selys.

Mirror Lake, Kaslo, July 17 (1 ♂), August 6 (1 ♂).

**Æschna juncea** (Linnæus).

Kaslo, August 7 (1 ♂).

**Æschna multicolor** Hagen.

Loon Lake, Ainsworth, July 11 (2 ♂♂).

[**Æschna constricta** Say.

Not taken in the Kootenay District, but Dr. Dyar collected two ♂ specimens on Vancouver Island—one at Shawnigan Lake, August 31, and the other at Wellington, September 2.]

**Æschna** spp.

"Lilypad Lake," Kaslo, July 8 (1 ♀); Bear Lake, July 21 (1 ♀); South Fork Creek, August 11 (1 ♀):

Also a ♀ from Banff, Alberta, collected on August 16.

**Somatochlora semicircularis** (Selys).

Loon Lake, Ainsworth, July 11 (1 ♂); Bear Lake, July 20 (1 ♀).

The triangle is crossed in the left hind wing of the ♂ and in both hind wings of the ♀. The triangles are crossed in the fore wings of both specimens, but there is in the U. S. National Museum a specimen collected by the writer on the Snake River, Yellowstone National Park, August 14, 1896, in which the triangles of both fore wings are free, although the cross-vein is indicated at either end in the right wing.

**Cordulia shurtleffi** Scudder.

"Lilypad Lake," Kaslo, May 29 (Dyar: 1 ♂), June 7 (Dyar: 1 ♀), June 10 (3 ♂♂); Loon Lake, Ainsworth, July 11 (17 ♂♂).

Five of these specimens show irregularities in venation, as follows: The single ♀ has a *second* cubito-anal cross-vein in the right hind wing; while of the other specimens—♂♂, all from Loon Lake—one has a second cubito-anal cross-vein in the *right* hind wing; one has this vein, interrupted in the middle, in the *left* hind wing; one has this vein in *both* hind wings; while the fourth specimen has *no* cubito-anal cross-vein in *either* hind

wing, although the first cross vein is indicated at the upper and lower extremities of the median space.

**Leucorhinia hudsonica** (Selys).

"Lilypad Lake," Kaslo, June 7 (Dyar: 1 ♀); Fletcher's Ranch, Kaslo, 2,800 feet alt., June 11 (1 ♂); Ainsworth, June 8 (Dyar: 1 ♂, 1 ♀).

The triangle of fore wings is crossed in all four of our specimens. The postcubitals vary from 7 to 10. The internal triangle, in the ♂ collected on June 11, is 3-celled in right fore wing, partially crossed by a single vein in the left fore wing; in the ♂ from Ainsworth the internal triangles are 2-celled in both fore wings; in the ♀ collected on June 7 the internal triangle in right fore wing is 3-celled, in left fore wing open, the triangle of left hind wing is crossed and there is one supratrangular on the right hind wing; in the ♀ from Ainsworth the internal triangle is 2-celled in left fore wing, free in right fore wing.

**Leucorhinia proxima** Calvert.

"Lilypad Lake," Kaslo, June 1 (Dyar: 1 teneral ♂), June 10 (1 ♂); Kaslo, June 12, found dead on hotel window (1 ♂), June 26 (1 ♂), July 2 (1 ♀), July 9 (1 ♂).

The specimen collected on June 1 has the wings subfumose.

**Sympetrum corruptum** (Hagen).

Kaslo, June 7 (Dyar: 1 ♀), June 13 (1 ♀), June 18 (3 ♂♂), June 19 (2 ♂♂, 2 ♀♀), June 23 (1 ♀), June 26 (2 ♂♂, 1 ♀), June 28 (1 ♂), June 29 (3 ♂♂), July 2 (4 ♀♀); Fletcher's Ranch, Kaslo, 2,800 feet, June 11 (1 ♂); Loon Lake, Ainsworth, July 11 (1 ♂).

**Sympetrum madidum** (Hagen).

Kaslo, August 5 (1 ♀).

The single specimen seems to be referable to this species rather than to any other of the described North American species of *Sympetrum*.

**Sympetrum obtrusum** (Hagen).

Kaslo, August 7 (2 ♀♀).

The writer had determined these specimens, from the description, as Hagen's *decisum*; but Dr. Calvert has since informed him that some years ago, from a study of Hagen's types of that species, he reached the conclusion that *decisum* is a synonym of *obtrusum*.

[**Sympetrum vicinum** (Hagen).

Wellington, September 2 (Dyar: 1 ♂).]

**Sympetrum semicinctum** (Say).

Kaslo, August 6 (1 ♀), August 7 (1 ♂).

**[Sympetrum costiferum** (Uhler).

Wellington, September 2 (Dyar: 1 ♀).]

**[Sympetrum scoticum** (Donovan).

Banff, Alberta (N. B. Sanson: 1 teneral ♂, 1 adult ♂, 1 ♀).]

**Libellula quadrimaculata** Linnæus.

Kaslo, May 29 (Dyar: 1 ♀), June 9 (1 ♂), June 11, Mirror Lake, 1,670 feet, and Fletcher's Ranch, 2,800 feet (21 ♂♂, 5 ♀♀, 2 pairs *in coitu*), June 14 (2 ♂♂), June 16 (1 ♀), June 18 (1 ♂, 1 ♀), July 2 (1 ♂).

—The concluding paper was by Mr. Banks, and entitled:

**ARACHNIDS FROM COCOS ISLAND.**

BY NATHAN BANKS.

Cocos Island, situated in the Pacific Ocean some distance off the west coast of Mexico, has been rarely visited by naturalists. The only spider previously recorded from the island is *Argyraepeira nigriventris* Keys., which was taken by the Hopkins-Stanford Galapagos Expedition. A few years ago Dr. Paul Biolley of San José, Costa Rica, visited the island, and several papers have been published on the results of his trip. The Arachnida were sent to me for examination, and although few contain one or two interesting things. The most important is a Phalangid representing a new genus. There were eight species in the collection, six spiders, and two Phalangids. The types are in the collection of the writer.

**ARANEIDA.****Gasteracantha hexacantha** Fabricius.

Several specimens of the usual type. This is a widely distributed species in the tropics.

**Gasteracantha biolleyi**, new species.

Cephalothorax black; legs and sternum black; abdomen yellow, with black spines and marks; a band connecting the larger lateral spines, an oblong spot near base of anterior spines, and a crescent each side in front; from the black band there is a mark extending to the posterior spines; all the sigillæ are on these black marks. The venter is black, with many small yellowish spots. In shape it is much like *G. cancriformis*,