

# The Collembola (Springtails) of British Columbia

Valin G. Marshall and Robert A. Cannings

This list of the Collembola of British Columbia was originally compiled in 2002 from several sources by Dr. Valin G. Marshall, a soil scientist retired from the Canadian Forest Service (Pacific Forestry Centre, Victoria, BC). I do not study Collembola, but some time ago I attempted to document the species in British Columbia as part of a much larger project on the families of hexapods of the province, and Valin gave me the list to use in this work. I have modified it several times, most recently in 2013. However, the list is undoubtedly out-of-date and requires revision. Additional documentation of the Canadian fauna (Babenko *et al.* 2019, Turnbull and Stebaeva 2019) has been published since then.

Species in black are from Skidmore (1995); those in blue are from Battigelli and Marshall (1993), Setälä and Marshall (1994), and Rusek and Marshall (1995); and those in red are from Jan Addison (unpublished). Those in pink are from Buffy Baumbrough (Berch *et al.* 2001) and unpublished. Those in green are from a list given to me of his Canadian collection by Arne Fjellberg (unpublished), plum from Cannings and Cannings (1997); and orange from Rob Cannings (*fide* Frans Janssens *in litt.*).

An earlier and slightly different version of this list was published (2010) on the Internet as <http://www.collembola.org/publicat/collbc.pdf>, part of [Checklist of the Collembola of the World](#) (Bellinger *et al.* 1996–2023). The latter site gives a good summary of the classification, biology and diversity of Collembola.

Rob Cannings  
Royal BC Museum  
March 2023

## 1. Family Poduridae

1. *Podura aquatica* Linné, 1758

## 2. Family Hypogastruridae

1. *Schaefferia cheoha* Wray 1963
2. *Schaefferia duodecimocellata* Bonet 1945
3. *Ceratophysella armata* Nicolet, 1842
4. *Ceratophysella denticulata* (Bagnall, 1941)
5. *Ceratophysella pecki* (Christiansen and Bellinger 1980-81)
6. *Ceratophysella pseudarmata* (Folsom, 1916)
7. *Ceratophysella glancei* Hammer, 1953
8. *Ceratophysella sp.*

9. *Ceratophysella* sp.2
10. *Hypogastrura (Cyclograna) horrida* Yosii, 1960
11. *Hypogastrura (Cyclograna) krafti* (Scott, 1962)
12. *Hypogastrura (Cyclograna) virga* Christiansen & Bellinger, 1980-81
13. *Hypogastrura (Cyclograna) vulgaris* (Yosii, 1960)
14. *Hypogastrura (Cyclograna) wallmoi* Fjellberg, 1985
15. *Hypogastrura (Hypogastrura) matura* (Folsom, 1916)
16. *Hypogastrura (Hypogastrura) nivicola* (Fitch, 1846)
17. *Hypogastrura (Hypogastrura) pannosa* (MacNamara, 1922)
18. *Hypogastrura (Hypogastrura) perplexa* Christiansen and Bellinger 1980-81
19. *Hypogastrura (Hypogastrura) purpurescens* (Lubbock, 1868)
20. *Hypogastrura (Hypogastrura) tookli* Fjellberg, 1985
21. *Hypogastrura (Hypogastrura) trybomi* (Schött, 1893)
22. *Hypogastrura (Hypogastrura) tullbergi* (Schäfer, 1900)
23. *Hypogastrura (Hypogastrura) utahensis* (wray, 1953)
24. *Hypogastrura (Hypogastrura) viatica* (Tullberg, 1872)
25. *Hypogastrura (Mitchellania) virga* Christainsen & Bellinger, 1980-81
26. *Hypogastrura (Mitchellania) vulgaris* Yosii, 1960
27. *Hypogastrura (Mucrella) arborea* Fjellberg, 1992
28. *Microgastrura minutissima* (Mills, 1934)
29. *Willemia arida* Fjellberg, 1991
30. *Willemia anophthalma* Börner 1901
31. *Willemia biseta* Christiansen & Bellinger, 1980-81
32. *Willemia denisi* Mills, 1932
33. *Willemia granulata* Fjellberg , 1985
34. *Willemia intermedia* Mills, 1934
35. *Willemia scandinavica* Stach, 1949
36. *Xenylla affiniformis* Stach, 1929
37. *Xenylla canadensis* Hammer, 1953
38. *Xenylla humicola* (O. Fabricius, 1870)

### 3. Family Odontellidae

1. *Odontella biloba* Christiansen & Bellinger, 1980-81
2. *Odontella conifer* Mills, 1934
3. *Odontella rossi* Christainsen & Bellinger, 1980-81
4. *Odentella shasta* Christainsen & Bellinger, 1980-81
5. *Odontella stella* Christiansen and Bellinger 1980-81
6. *Odontella substriata* Wray, 1952
7. *Odontella* sp.
8. *Xenyllodes amata* Axelson, 1903
9. *Xenyllodes wapiti* Fjellberg, 1985
10. *Xenyllodes* sp.

#### 4. Family Neanuridae

1. *Anurida maritima* (Guérin-Méneville, 1838)
2. *Anurida polaris* (Hammer, 1954)
3. *Anurida tullbergi* Schött, 1891
4. *Brachystomella parva* (Schäffer, 1896)
5. *Brachystomella stachi* Mills, 1934
6. *Cristobella ornata* (Folsom, 1920)
7. *Cristobella setosa* (Canby, 1926)
8. *Cristobella* sp. n.
9. *Friesea alaskella* Fjellberg, 1985
10. *Friesea cera* Christiansen and Bellinger 1973
11. *Friesea fara* Christiansen & Bellinger, 1973
12. *Friesea grandis* Mills, 1934
13. *Friesea millsi* Christiansen & Bellinger, 1980-81
14. *Frisea pentacantha* Mills, 1934
15. *Friesea quinta* Christiansen & Bellinger, 1974
16. *Friesea wilkeyi* Christiansen & Bellinger, 1974
17. *Micranurida pygmaea* (Börner, 1901)
18. *Micranurida spirillifera* (Hammer, 1953)
19. *Micranurida* sp.
20. *Morulina multatuberculata* (Coleman, 1941)
21. *Morulodes serratus* (Folsom, 1916)
22. *Neanura (Deutonura) frigida* Yosii, 1969
23. *Neanura (Deutonura)* sp.
24. *Neanura (Lathriopyga) ornata* Folsom, 1902
25. *Neanura (Lathriopyga) setosa* Canby, 1926
26. *Neanura (Neanura) persimilis* Mills, 1934
27. *Paranura colorata* Mills, 1934
28. *Paranura sitchensis* Fjellberg, 1985
29. *Paranura* sp.
30. *Pratanurida foxi* Fjellberg, 1985
31. *Pratanurida tananensis* Fjellberg 1985
32. *Pseudachorutes aureofasciatus* (Harvey, 1896)
33. *Pseudachorutes columbicus* Rusek, 1991
34. *Pseudachorutes corticicolus* (Schäffer, 1897)
35. *Pseudachorutes curtus* Christiansen & Bellinger, 1980-81
36. *Pseudachorutes lunatus* Folsom, 1916
37. *Pseudachorutes saxatilis* MacNammara, 1920
38. *Pseudachorutes subcrassoides* Mills, 1934
39. *Pseudachorutes* sp.1
40. *Pseudachorutes* sp.2
41. *Pseudachorutes* sp. (POA-10)
42. *Pseudachorutes* sp.

## 5. Family Onychiuridae

1. *Lophognathella choreutes* Börner, 1908
2. *Multivesicula columbica* Rusek 1982
3. *Multivesicula punctata* Rusek, 1982
4. *Onychiurus (Archaphorura) absoloni* Böner, 1901
5. *Onychiurus (Hymenaphorura) deca* Christiansen & Bellinger 1980-81
6. *Onychiurus (Hymenaphorura) similis* (Folsom, 1917)
7. *Onychiurus (Hymenaphorura) sp. ? talus* Christiansen & Bellinger 1980-81
8. *Onychiurus (Onychiurus) dentatus* (Folsom, 1902)
9. *Onychiurus (Onychiurus) eisi* Rusek, 1976
10. *Onychiurus (Onychiurus) eous* Christiansen & Bellinger, 1980-81
11. *Onychiurus (Onychiurus) flavescens* Kinoshita, 1916
12. *Onychiurus (Onychiurus) ramosus* Folsom, 1917
13. *Onychiurus (Onychiurus) millsi* Chamberlain, 1943
14. *Onychiurus (Onychiurus) reluctus* Christiansen, 1961
15. *Onychiurus sp. ? lusus* Christiansen & Bellinger, 1980-81
16. *Onychiurus cf. wilchi* Wray, 1950
17. *Onychiurus sp.*
18. *Onychiurus (Paotophorura) armatus* group (Tullberg, 1869)
19. *Onychiurus (Protaphorura) cocklei* (Folsom, 1908)
20. *Onychiurus (Protaphorura) churchilliana* Hammer, 1953
21. *Onychiurus (Protaphorura) debilis* (Moniez, 1890)
22. *Onychiurus (Protaphorura) duodecimpunctatus* (Folsom, 1919)
23. *Onychiurus (Protaphorura) pseudarmatus* (Folsom, 1917)
24. *Onychiurus (Protaphorura) sibiricus* (Tullberg) 1917
25. *Onychiurus (Protaphorura) subtenuis* (Folsom, 1917)
26. *Onychiurus (Protaphorura) uenio* (Yosii, 1954)
27. *Onychiurus (Protaphorura) voegtlini* Christiansen and Bellinger, 1980-81
28. *Sensiphorura marshalli* Rusek, 1976
29. *Tullbergia (Tullbergia) bella* Fjellberg, 1988
30. *Tullbergia (Tullbergia) duops* Christiansen and Bellinger 1980-81
31. *Tullbergia (Tullbergia) iowensis* Mills, 1932
32. *Tullbergia (Tullbergia) krausbaueri* Börner, 1901
33. *Tullbergia (Tullbergia) macrochaeta* Rusek, 1976
34. *Tullbergia (Tullbergia) mala* Christiansen and Bellinger 1980-81
35. *Tullbergia (Tullbergia) obtusochaeta* (Rusek, 1976)
36. *Tullbergia (Tullbergia) pacifica* (Rusek, 1976)
37. *Tullbergia (Tullbergia) ruseki* Christiansen & Bellinger, 1980-81
38. *Tullbergia (Tullbergia) vancouverica* (Rusek, 1976)
39. *Tullbergia (Tullbergia) yosii* (Rusek, 1967)

## 6. Family Isotomidae

1. *Agrenia agilis* Fjellberg, 1986
2. *Agrenia atroviridis* Fjellberg, 1986
3. *Agrenia bidenticulata* (Tullberg, 1876)
4. *Agrenia cyanura* Fjellberg, 1986
5. *Agrenia riparia* Fjellberg, 1986
6. *Anurophorus pacificus* Potapov, 1997
7. *Anurophorus sorosi* Potapov, 1997
8. *Anurophorus septentrionalis* Palissa 1966
9. *Anurophorus trisensillus* Potapov, 1997
10. *Ballistura libra* Christiansen & Bellinger, 1980-81
11. *Coloburella (Coloburella) octogeneria* (Mills & Schmidt, 1957)
12. *Cryptopygus* sp. ? *exilis*
13. *Cryptopygus* sp. n.
14. *Cryptopygus thermophilus* (Axelson) 1900
15. *Folsomia bisetosa* Gisin 1953
16. *Folsomia candida* Willem, 1902
17. *Folsomia duodecimoculata* Ford, 1962
18. *Folsomia elongata* (MacGillivray, 1896)
19. *Folsomia fimeteria* (Linné, 1758)
20. *Folsomia inoculata* Stach, 1947
21. *Folsomia macroseta* Ford, 1962
22. *Folsomia nivalis* (Packard, 1873)
23. *Folsomia ozeana* Yosii, 1954
24. *Folsomia picea* Christiansen & Tucker, 1977
25. *Folsomia quadrioculata* (Tullberg, 1871)
26. *Folsomia regularis* Hammer, 1952
27. *Folsomia sexoculata* (Tullberg, 1871)
28. *Folsomia stella* Christiansen & Tucker, 1977
29. *Folsomia* sp.
30. *Folsomides parvulus* Stach ,1922
31. *Isotoma (Cheirotoma) spatulata* Chamberlain, 1943
32. *Isotoma (Cheirotoma)* sp.
33. *Isotoma (Desoria) agrelli* Delamare, 1950
34. *Isotoma (Desoria) alaskensis* Fjellberg, 1978
35. *Isotoma (Desoria) ekmani* Fjellberg, 1977
36. *Isotoma (Desoria) ahiehi* (Christiansen and Bellinger, 1992)
37. *Isotoma (Desoria) flora* Christiansen & Bellinger, 1980-81
38. *Isotoma (Desoria) multisetis* Carpenter & Phillips, 1922
39. *Isotoma (Desoria) notabilis* Schäffer, 1896
40. *Isotoma (Desoria) tariva* Wray, 1953
41. *Isotoma (Desoria) trispinata* MacGillivray, 1896
42. *Isotoma (Desoria) uniens* Christiansen & Bellinger, 1980-81
43. *Isotoma (Isotoma) viridis* Bourlet, 1839
44. *Isotoma* sp.

45. *Isotoma* sp.2  
 46. *Isotoma (Pseudisotoma) monochaeta* Kos, 1942  
 47. *Isotoma (Pseudisotoma) sensibilis* (Tullberg, 1876)  
 48. *Isotoma (Vertagopus) alpa* Christiansen & Bellinger, 1980-81  
 49. *Isotoma (Vertagopus) arborea* (Linné, 1758)  
 50. *Isotoma (Vertagopus) beta* (Christiansen and Bellinger ,1980-81)  
 51. *Isotoma (Vertagopus) pseudocinerea* (Fjellberg, 1975)  
 52. *Isotoma (Vertagopus)* sp.  
 53. *Isotomiella minor* (Schäffer, 1986)  
 54. *Isotomodes productus* (Axelson, 1903)  
 55. *Isotomodes klostermani* Bernard 1973  
 56. *Isotomorus (Isotomorus) palustris* (Müller, 1776)  
 57. *Metisotoma grandiceps* (Reuter, 1891)  
 58. *Micrisotoma achromata* Bellinger, 1952  
 59. *Proisotoma (Proisotoma) agrelli* (Delamare, 1950)  
 60. *Proisotoma (Proisotoma) beta* Christiansen & Bellinger, 1980-81  
 61. *Proisotoma (Proisotoma) immersa* (Folsom, 1924)  
 62. *Proisotoma (Proisotoma) mackenziana* Hammer, 1953  
 63. *Proisotoma (Proisotoma) minima* (Absolon, 1901)  
 64. *Proisotoma (Proisotoma) minuta* (Tullberg 1871)  
 65. *Pseudanorphorus binoculatus* (Kseneman, 1934)  
 66. *Pseudanurophorus arcticus* (Christiansen, 1952)  
 67. *Pseudanurophorus* sp  
 68. *Tetraclantha californica* Deharveng 1978  
 69. *Tetraclantha pacifica* Rusek & Marshall, 1976

## 7. Family Entomobryidae

1. *Entomobrya (Entomobrya) assuta* Folsom, 1924
2. *Entomobrya (Entomobrya) comparata* Folsom, 1919
3. *Entomobrya (Entomobrya) confusa* Christiansen, 1958
4. *Entomobrya (Entomobrya) multifasciata* (Tullberg, 1871)
5. *Entomobrya (Entomobrya) triangularis* (Schött, 1896)
6. *Entomobrya nivalis* (Linné, 1758)
7. *Entomobrya washingtonia* Mills, 1896
8. *Entomobrya* sp.
9. *Entomobrya* sp.1
10. *Entomobrya* sp. 2
11. *Entomobrya (Entomobryoidea) guthriei* Mills, 1931
12. *Entomobrya (Mesentotoma)* sp.
13. *Harlomillsia oculata* (Mills, 1937)
14. *Lepidocyrtus cyaneus* Tullberg, 1871
15. *Lepidocyrtus lanuginosus* (Gmelin, 1788)
16. *Lepidocyrtus violaceus* Fourcroy , 1785
17. *Lepidocyrtus* sp.
18. *Orchesella cincta* (Liné, 1758)

19. *Orchesella zebra* Guthrie, 1903
20. *Pseudosinella alba* (Packard, 1873)
21. *Pseudosinella collina* Wray, 1952
- 22. *Pseudosinella octopunctata* Börner, 1901**
23. *Seira bipunctata* Packard, 1873
24. *Sinella (Sinella) baca* Christiansen & Bellinger, 1980-81
25. *Sinella (Sinella) binoculata* (Schött, 1896)
26. *Sinella (Sinella) curviseta* Brook, 1882
- 27. *Sinella (Sinella) sexoculata* (Schött, 1896)**
- 28. *Sinella* sp.1**
- 29. *Sinella* sp.2**
- 30. *Sinella* sp. n.**
31. *Willowsia buskii* (Lubbock, 1870)

## 8. Family Oncopoduridae

1. *Oncopodura* sp.

## 9. Family Tomoceridae

1. *Tomocerus vulgaris* (Tullberg, 1871)
2. *Tomocerus (Plutomurus) brevimucromatus* Denis, 1929
3. *Tomocerus (Pogonognathellus) dubius* Christiansen, 1965
4. *Tomocerus (Pogonognathellus) elegans* (Maynard, 1951)
5. *Tomocerus (Pogonognathellus) flavescentis* Tullberg, 1871
6. *Tomocerus (Pogonognathellus) wilkeyi* Christansen, 1965
7. *Tomocerus (Pogonognathellus)* sp.
8. *Tomocerus (Tomocerina) lamelliferus* Mills, 1934
9. *Tomocerus (Tomocerina) curtus* Christansen
10. *Tomocerus (Tomolonus) reductus* (Mills, 1949)
11. *Tomocerus* sp.

## 10. Family Sminthurididae

1. *Sminthurides (Denisiella) sexspinnatus* Denis, 1931
2. *Sminthurides (Sminthurides) aquaticus* (Bourlet, 1843)
3. ***Sminthurides (Sminthurides) malmgreni* (Tullberg, 1876)**
4. *Sminthurides (Sminthurides) occultus* Mills 1934
5. *Sminthurides (Stenacidia)* sp.
6. *Sphaerida pumilis* (Krausbauer, 1898)
7. *Sphaerida serrata* (Folsom & Mills, 1938)
8. *Sphaeridia* sp. n.

## 11. Family Arrhopalitidae

1. *Arrhopalites benitus* (Folsom, 1896)
2. *Arrhopalites clarus* Christiansen, 1966
3. *Arrhopalites diversus* Mills 1934
4. *Arrhopalites hirtus* Christiansen, 1966
5. *Arrhopalites principalis* Stach, 1945
6. *Arrhopalites* sp.
7. *Arrhopalites* sp.2

## 12. Family Katiannidae

1. *Sminthurinus (Polykatianna) sminthurinus* (Mills, 1934)
2. *Sminthurinus (Sminthurinus) conchyliatus* Snider, 1978
3. *Sminthurinus (Sminthurinus) elegans* (Fitch, 1863)
4. *Sminthurinus (Sminthurinus) henshawi* (Folsom, 1896)
5. *Sminthurinus (Sminthurinus) quadrimaculatus* (Ryder, 1878)
6. *Sminthurinus* sp.

## 13. Family Dicyrtomidae

1. *Dicyrtoma* sp.
2. *Dicyrtomina minuta* (Fabricius 1783) forma *ornata* (Nicolet, 1841)
3. *Ptenothrix atra* (Linné, 1758)
4. *Ptenothrix maculosa* (Schött, 1891)
5. *Ptenothrix marmorata* (Packard 1973)
6. *Ptenothrix* sp.

## 14. Family Sminthuridae

1. *Sminthurus* sp.

## 15. Family Bourletiellidae

1. *Bourletiella (Bourletiella) hortensis* (Fitch, 1863)
2. *Pseudobourletiella spinata* (MacGillivray, 1893)

## 16. Family Neelidae

1. *Megalothorax minimus* Willem, 1900

## 17. Family Mackenziellidae

1. *Mackenziella psocoides* Hammer, 1953

## References

- Babenko, A., S. Stebaeva, and M.S. Turnbull. 2019. An updated checklist of Canadian and Alaskan Collembola. *Zootaxa* 4592 (1): 001–125.  
<https://doi.org/10.11646/zootaxa.4592.1.1>
- Battigelli, J.P. and V.G. Marshall. 1993. Relationships between soil fauna and soil pollutants. In: Proceedings of the Forest Ecosystem Dynamics Workshop, February 10–11, 1993. FRDA II report 210. Government of Canada, Province of British Columbia. pp. 31–34.
- Bellinger, P.F., K.A. Christiansen and F. Janssens. 1996–2023. Checklist of the Collembola of the World. <http://www.collembola.org>
- Berch, S.M., B. Baumbrough, J. Battigelli, P. Kroeger, N. Strub, and L. de Montigny. 2001. [Preliminary assessment of selected communities of soil organisms under different conifer species](#). British Columbia Ministry of Forests, Research Branch, Victoria, BC. Research Report 20.
- Cannings, R.A. and S.G. Cannings. 1997. Terrestrial arthropods of Brooks Peninsula. In R.J. Hebda and J.C. Haggarty (eds). Brooks Peninsula: an Ice-Age Refugium on Vancouver Island. B.C. Parks Occasional Paper No. 5. Victoria.
- Rusek, J. and V.G. Marshall. 1995. Long-term changes of collembolan communities in forest soils. *Polskie Pismo Entomologiczne* 64: 159–171.
- Setälä, H. and V.G. Marshall. 1994. Stumps as a habitat for Collembola during succession from clear-cuts to old-growth Douglas-fir forests. *Pedobiologia* 38: 307–326.
- Skidmore, R.E. 1995. Checklist of Collembola (Insecta: Apterygota) of Canada and Alaska. *Proceedings of the Entomological Society of Ontario* 126: 45–76.
- Turnbull, M.S. and S. Stebaeva. 2019. Collembola of Canada. In D.W. Langor and C.S. Sheffield (Eds), *The Biota of Canada – A Biodiversity Assessment. Part 1: The Terrestrial Arthropods*. ZooKeys 819: 187–195. <https://doi.org/10.3897/zookeys.819.23653>