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AN ANNOTATED LIST OF THE AQUATIC INSECTS OF SOUTHEASTERN IDAHO, PART II: TRICHOPTERA

Robert L. Newell¹ and G. Wayne Minshall²

ABSTRACT.— Distribution records for the Trichoptera occurring in the southeastern one-third of Idaho are summarized based on published records and collections by the authors and their colleagues. The study revealed representatives of 13 families, 37 genera, and 84 species. Several species were collected for the first time in Idaho, including: *Hesperophylax magnus*, *Limnephilus frijole* and *L. thorus*, *Psychoglypha orniae*, *Ceraclea annulicornis* and *C. coph*a, *Polycentropus crassicornis*, *Tinodes provo*, and *Agrypnia dextra*.

The Trichoptera (caddisflies) comprise one of several purely aquatic orders of insects. This small order is composed of some 30 families and 5,000 species distributed throughout the world. This study revealed representatives of 13 families, 37 genera, and 84 species. Some genera were captured, but a species determination was not possible and these are not listed. The study area includes the southeastern one-third of Idaho (Fig. 1). Note that this figure corrects and replaces the one given in Newell and Minshall (1976).

Information on geographical distribution of caddisflies in Idaho is widely distributed. Local investigations that included distributional records are Andrews (1972), Givens (1976), Newell and Potter (1973), Nimmo (1971), Kroger (1970), Smith (1965, 1968a, 1968b, 1969), Terch (1972), Winger (1968) and Wold (1974). Other Idaho records are available in Denning (1948, 1950, 1954, 1956, 1958, 1965a, 1965b, 1970, 1973), Denning and Blicke (1972), Gordon (1974), Milne and Milne (1938), Hornung and Barr (1970), Ross (1941, 1944, 1947, 1951, 1952, 1956), and Schmid (1968, 1970). Identification of immature caddisflies will be aided greatly by the key of Wiggins (1977). Several of the above-listed papers include taxonomic keys to adult caddisflies. The taxonomic treatment used throughout this paper is that of Ross (1967).

Several species were collected for the

first time in Idaho, and these include: *Hesperophylax magnus*, *Limnephilus frijole* and *L. thorus*, *Psychoglypha orniae*, *Ceraclea annulicornis* and *C. coph*a, *Polycentropus crassicornis*, and *Tinodes provo* and *Agrypnia dextra*.

Individuals of the family Hydropsychidae were the most frequently encountered. Individuals of *Hydropsyche occidentalis* were extremely abundant in the main Snake River, often visible in swarms of thousands of adults. Several species were encountered only once, either because of their small populations or because their habitats were difficult to collect (i.e., high altitude streams).

The large number of species collected is probably indicative of the diversity of available habitats, ranging from spring seeps to large mountain rivers and from silty lowland streams and irrigation reservoirs to constant temperature springs.

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FAMILY HYDROPSYCHIDAE

1. *Arctopsyche grandis* (Banks).—Bear Lake Co.: St. Charles Cr. Blaine Co.: Big

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Wood R. Bonneville Co.: Pine Cr., Rainey Cr., Snake R. (S. Fk.). Butte Co.: Little Lost R. Caribou Co.: Portneuf R., Tin Cup Cr. Clark Co.: Birch Cr., Medicine Lodge Cr. Custer Co.: Big Lost R.

2. *Cheumatopsyche campyla* Ross.—Bonneville Co.: Idaho Falls. Franklin Co.: Preston. Gooding Co.: Niagara Springs, Snake R. Twin Falls Co.: Rock Cr.

3. *Cheumatopsyche enonis* Ross.—Bonneville Co.: Idaho Falls. Twin Falls Co.: Salmon Falls Cr.

4. *Cheumatopsyche pettiti* (Banks).—Bear Lake Co.: Dingle. Bonneville Co.: Brockman Cr. Caribou Co.: Lane's Cr. Oneida Co.: Deep Cr.

5. *Hydropsyche bifida* Banks.—Bannock Co.: Mink Cr.

6. *Hydropsyche californica* Banks.—Bannock Co.: Portneuf R. Bingham Co.: Spring Cr. Gooding Co.: Niagara Springs. Oneida

Co.: Deep Cr. Owyhee Co.: Snake R. Power Co.: Snake R.

7. *Hydropsyche cockerelli* Banks.—Bonneville Co.: Snake R. Teton Co.: Teton R.

8. *Hydropsyche occidentalis* Banks.—Bannock Co.: Portneuf R. Caribou Co.: Portneuf R. Fremont Co.: Falls R. Gooding Co.: Niagara Springs. Oneida Co.: Deep Cr. Power Co.: Snake R.

9. *Hydropsyche oslari* Banks.—Bannock Co.: Mink Cr. Bonneville Co.: Pine Cr., Rainey Cr. Teton Co.: Trail Cr.

10. *Parapsyche almota* Ross.—Bannock Co.: Mink Cr.

11. *Parapsyche elsis* Milne.—Blaine Co.: Big Wood R. Bonneville Co.: Rainey Cr. Butte Co.: Little Lost R. Franklin Co.: Cub R. Lemhi Co.: Little Lost R.

FAMILY POLYCENTROPODIDAE

12. *Polycentropus cinereus* Hagen.—Bingham Co.: Spring Cr.

13. *Polycentropus crassicornis* Walker.—Bingham Co.: Spring Cr.

FAMILY PSYCHOMYIIDAE

14. *Psychomyia flavida* Hagen.—Fremont Co.: Falls R., Robinson Cr., Snake R. (Henry's Fk.). Power Co.: Snake R.

15. *Tinodes provo* Ross.—Gooding Co.: Niagara Springs. Oneida Co.: Deep Cr.

FAMILY PHILOPOTAMIDAE

16. *Dolophilodes aequalis* (Banks).—Bannock Co.: Mink Cr., Rapid Cr. Bonneville Co.: Rainey Cr.

17. *Wormaldia gabriella* (Banks).—Bannock Co.: Mink Cr.

FAMILY RHYACOPHILIDAE

18. *Rhyacophila acropedes* Banks.—Bannock Co.: Mink Cr. Bonneville Co.: Pine Cr., Rainey Cr. Butte Co.: Little Lost R. Clark Co.: Birch Cr., Medicine Lodge Cr. Gooding Co.: Niagara Springs. Teton Co.: Trail Cr.

19. *Rhyacophila alberta* Banks.—Bonneville Co.: Rainey Cr. Teton Co.: Trail Cr.



Fig. 1. An outline map of Idaho showing the location of the study area (shaded portion) in relation to the major river drainage systems. Note: This figure replaces the one given in Newell and Minshall (1976) in which the shaded area was lost in the printing process.

20. *Rhyacophila angelita* Banks.—Bonneville Co.: Rainey Cr.

21. *Rhyacophila bifila* Banks.—Fremont Co.: Falls Cr.

22. *Rhyacophila coloradensis* Banks.—Bonneville Co.: Pine Cr., Rainey Cr. Gooding Co.: Hagerman Springs, Niagara Springs, Teton Co.: Trail Cr.

23. *Rhyacophila hyalinata* Banks.—Butte Co.: Little Lost R.

24. *Rhyacophila narvae* Navas.—Butte Co.: Little Lost R.

25. *Rhyacophila pellisa* Ross.—Bannock Co.: Mink Cr. Bonneville Co.: Rainey Cr. Lemhi Co.: Little Lost R.

26. *Rhyacophila vaccua* Milne.—Clark Co.: Birch Cr. Lemhi Co.: Little Lost R. Teton Co.: Trail Cr.

27. *Rhyacophila vagrita* Milne.—Bonneville Co.: Rainey Cr.

28. *Rhyacophila vao* Milne.—Bannock Co.: Mink Cr. Blaine Co.: Big Wood R.

29. *Rhyacophila verrula* Milne.—Bonneville Co.: Rainey Cr. Lemhi Co.: Little Lost R. Teton Co.: Trail Cr.

30. *Rhyacophila vocala* Milne.—Bonneville Co.: Rainey Cr.

FAMILY GLOSSOSOMATIDAE

31. *Agapetus montanus* Denning.—Clark Co.: Beaver Cr.

32. *Anagapetus debilis* Ross.—Custer Co.: Wildhorse Cr.

33. *Glossosoma alascensis* Banks.—Bonneville Co.: Pine Cr. Custer Co.: Wildhorse Cr. Fremont Co.: Robinson Cr. Teton Co.: Trail Cr.

34. *Glossosoma idaho* Ross.—Fremont Co.: Falls R. Gooding Co.: Niagara Springs.

35. *Glossosoma intermedium* (Klapalek).—Teton Co.: N. Fk. Teton R.

36. *Glossosoma montana* Ross.—Bonneville Co.: Snake R. (S. Fk.). Fremont Co.: Falls R.

37. *Glossosoma schuhi* Ross.—Bannock Co.: Mink Cr.

38. *Glossosoma traviatum* Banks.—Fremont Co.: Falls R.

39. *Glossosoma velona* Ross.—Bannock Co.: Mink Cr. Bingham Co.: Spring Cr.

Caribou Co.: Portneuf R. Teton Co.: Teton R.

40. *Glossosoma verdona* Ross.—Bonneville Co.: Rainey Cr.

41. *Protoptila coloma* Ross.—Fremont Co.: Warm R.

FAMILY HYDROPTILIDAE

42. *Ochrotrichia logana* (Ross).—Gooding Co.: Niagara Springs.

43. *Ochrotrichia stylata* (Ross).—Power Co.: Snake R.

FAMILY LEPIDOSTOMATIDAE

44. *Lepidostoma pluvialis* (Milne).—Bannock Co.: Mink Cr.

45. *Lepidostoma podager* McLachlan.—Bannock Co.: Mink Cr.

46. *Lepidostoma strophis* Ross.—Bingham Co.: Spring Cr. Gooding Co.: Niagara Springs. Oneida Co.: Daniels Spring.

47. *Lepidostoma unicolor* (Banks).—Bannock Co.: Mink Cr. Bonneville Co.: Pine Cr.

FAMILY LIMNEPHILIDAE

48. *Amphicosmoecus canax* (Ross).—Bingham Co.: Spring Cr. Bonneville Co.: Rainey Cr. Custer Co.: Little Lost R. Fremont Co.: Snake R. (Henry's Fk.). Teton Co.: Trail Cr.

49. *Apatania chasica* (Denning).—Blaine Co.: Big Wood R. Bonneville Co.: Rainey Cr.

50. *Apatania comosa* Denning.—Bonneville Co.: Pine Cr.

51. *Chyranda centralis* (Banks).—Bannock Co.: Mink Cr. Custer Co.: Wildhorse Cr.

52. *Ecclisomyia maculosa* Banks.—Lemhi Co.: Little Lost R. Teton Co.: Trail Cr.

53. *Ecclisomyia simulata* Banks.—Bonneville Co.: Rainey Cr.

54. *Hesperophylax consimilis* (Banks).—Bannock Co.: Mink Cr. Bonneville Co.: Rainey Cr. Caribou Co.: Portneuf R.

55. *Hesperophylax incisus* Banks.—Bannock Co.: Mink Cr. Bonneville Co.: Rainey Cr. Fremont Co.: Buffalo R.

56. *Hesperophylax magnus* Banks.—Bonneville Co.: Rainey Cr.

57. *Lenarchus brevipennis* (Banks).—Fremont Co.: Pond near Upper Mesa Falls.

58. *Limnephilus challsa* Denning.—Blaine Co.: Hyndman Cr.

59. *Limnephilus extractus* Walker.—Fremont Co.: Snake R. (Henry's Fk.).

60. *Limnephilus frijole* Ross.—Oneida Co.: Deep Cr.

61. *Limnephilus spinatus* Banks.—Bannock Co.: Hawkins Res. Bonneville Co.: Pond near Palisades Res. Caribou Co.: Grey's Lake. Fremont Co.: Snake R. (Henry's Fk.). Oneida Co.: Daniels Res.

62. *Limnephilus thorus* Ross.—Bingham Co.: Clear Cr.

63. *Neophylax occidentis* Banks.—Lemhi Co.: Firebox Cr.

64. *Neophylax splendens* Denning.—Bannock Co.: Mink Cr. Bonneville Co.: Rainey Cr.

65. *Neothremma alicia* Banks.—Teton Co.: Trail Cr.

66. *Oligophlebodes minutus* (Banks).—Bannock Co.: Gibson Jack Cr., Mink Cr.

67. *Oligophlebodes ruthae* Ross.—Camas Co.: Big Lost R.

68. *Oligophlebodes sierra* Ross.—Bear Lake Co.: Bloomington Cr., St. Charles Cr. Bonneville Co.: Rainey Cr.

69. *Onocosmoecus atripes* (Hagen).—Bannock Co.: Mink Cr. Bingham Co.: Spring Cr. Bonneville Co.: Rainey Cr.

70. *Onocosmoecus unicolor* (Banks).—Bannock Co.: Mink Cr. Bingham Co.: Spring Cr. Bonneville Co.: Rainey Cr. Teton Co.: Trail Cr.

71. *Psychoglypha orniae* (Ross).—Bonneville Co.: Rainey Cr.

72. *Psychoglypha subborealis* (Banks).—Bannock Co.: Mink Cr. Bonneville Co.: Rainey Cr.

FAMILY PHRYGANEIDAE

73. *Agrypania dextra* Ross.—Bannock Co.: Pond in Indian Rocks St. Park.

FAMILY BRACHYCENTRIDAE

74. *Amiocentrus aspilus* (Ross).—Bingham Co.: Clear Cr., Spring Cr. Bonneville Co.: Rainey Cr. Teton Co.: Teton R.

75. *Brachycentrus americanus* (Banks).—Bannock Co.: Mink Cr. Bingham Co.: Clear Cr. Bonneville Co.: Pine Cr. Caribou Co.: Portneuf R.

76. *Brachycentrus occidentalis* Banks.—Bingham Co.: Spring Cr. Bonneville Co.: Rainey Cr. Butte Co.: Little Lost R. Clark Co.: Beaver Cr., Birch Cr., Camas Cr., Medicine Lodge Cr.

FAMILY HELICOPSYCHIDAE

77. *Helicopsyche borealis* (Hagen).—Bingham Co.: Clear Cr. Caribou Co.: Blackfoot R., Lane's Cr., Portneuf R. Clark Co.: Birch Cr., Camas Cr. Teton Co.: Warm Spring Cr.

FAMILY LEPTOCERIDAE

78. *Ceraclea annulicornis* (Stephens).—Power Co.: Snake R.

79. *Ceraclea coph*a (Ross).—Power Co.: Snake R.

80. *Ceraclea tarsipunctata* (Vorhies).—Bingham Co.: Snake R.

81. *Ceraclea transversa* (Hagen).—Cassia Co.: Small stream near Malta.

82. *Mystacides alafimbriata* Griffin.—Teton Co.: Pond near Teton R.

83. *Nectopsyche diarina* (Ross).—Blaine Co.: Big Wood R. Oneida Co.: Deep Cr.

84. *Triaenodes frontalis* Banks.—Bingham Co.: Spring Cr. Oneida Co.: Deep Cr.

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