

A CHECK-LIST OF MOLLUSCS OF GLACIER NATIONAL PARK, MONTANA

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Several aspects of the natural history of Glacier Park have been studied, and pamphlets have been printed which dealt with such well-known areas as wild-flowers, birds, mammals, and rocks. However, little has been published on the invertebrate faunas, and except for the work of S.S. Berry in 1919, no survey has been made of the Mollusca.

Glacier Park is a unique area for study, because within the Park are found headwaters of three great continental drainage systems: the Columbian, Hudsonian, and Missourian (see map, p. 2).

This checklist is based largely upon: (1) the collections of the authors, (2) the survey by Berry in 1916, (3) Pilsbry's monograph on North American Land Mollusca. The authors would like to thank Mr. Gerald S. Swenson of the Department of Zoology, University of Montana, for access to his collection records made during the summer of 1966. Most of the Sphaeriidae were identified by Rev. H. B. Herrington and his help is gratefully acknowledged. We should like to acknowledge the help and cooperation of the officials of Glacier National Park, particularly Mr. Ed Beatty and Mr. Francis Elmore.

Some of the collections made by the senior author in 1960 were sent to the Chicago Museum of Natural History. Where this is the case, their catalogue numbers are given and preceded by CNHM. Catalogue numbers of the collections

of the authors are preceded by their initials. Included are only those species for which actual records are available. Where synonyms occur in the literature, these are placed in parentheses after the specific name which the authors consider to be correct. In most cases, complete synonymies can be found in the references given after each species.

Distributions are not intended to be complete, but are given only as an indication of the range of each species within the Park.

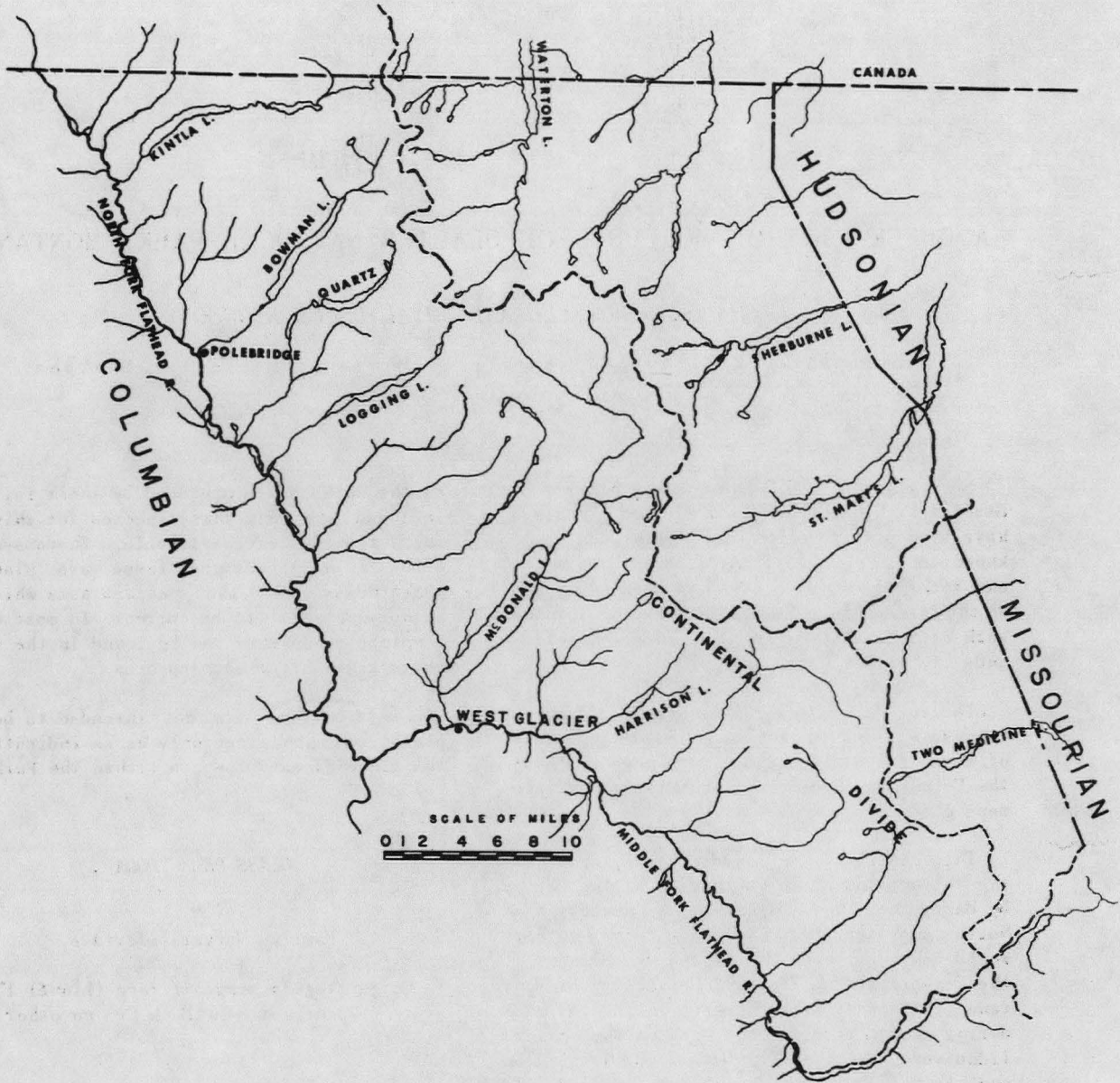
CLASS PELECYPODA

Family Margaritiferidae

1. *Margaritifera margaritifera* (Linné) 1758
Missouri dr.: Cut Bank Cr. no other data.

Family Sphaeriidae

2. *Pisidium abditum* Haldeman 1841
Hudsonian dr.: Iceberg Lake (Berry)
Columbian dr.: Logging Cr. (RBR 13147);
Pond near Granite Park Chalet (RBR 13247)
3. *Pisidium casertanum* (Poli) 1791
Hudsonian dr.: Swiftcurrent L.; Grinnell L.; Josephine L. (Lehmkuhl); Lost Lake (Russell & Brunson).



MAP OF GLACIER NATIONAL PARK, MONTANA, SHOWING DRAINAGE SYSTEMS

- Columbian dr.: Sprague Cr. (CNHM 105941); Bowman Cr.; (CNHM 105947); Polebridge (CNHM 105946).
4. *Pisidium idahoense* (Roper) 1890
Hudsonian dr.; Lower St. Mary's Lake (RHR 472).
5. *Pisidium lilljeborgi* Clessin 1896
Columbian dr.: Bridge on Camas Cr. (RBB 12947).
6. *Pisidium obtusale* form *rotundatum* Prime 1865
Columbian dr.: Polebridge (CNHM 106007).
7. *Pisidium variabile* Prime 1851
Hudsonian dr.: Swiftcurrent L. (Lehmkuhl).
8. *Musculium lacustre* form *ryckholti* (Normand) 1844
Columbian dr.: Pond near Camas Cr. (RBB 13047).
9. *Sphaerium nitidum* Clessin 1876
Hudsonian dr.: Swiftcurrent L. (Lehmkuhl).
10. *Sphaerium occidentale* (Prime) 1852
Columbian dr.: Polebridge (CNHM 105973); Bowman L.; (CNHM 105971) RBB 4259; south of Kintla L.; (RHR 288, RBB 9257).
11. *Sphaerium securis* (Prime) 1851
Columbian dr.; Polebridge (CNHM 105962).
14. *Ferrissia fusca* (C. B. Adams) 1840
Columbian dr.: Stream near Howe L. (Swenson); Camas Cr. (RBB 24347).

Family Lymnaeidae

15. *Lymnaea stagnalis appressa* (Say) 1818
Columbian dr.: marsh south of Kintla L. (RHR 126, 239); Lake McDonald (Swenson).
16. *Stagnicola caperata* (Say) 1829
Columbian dr.: Lake McDonald; Quartz Cr.; Harrison L.; Three Bears L. (Swenson); Mud Cr. (RBB 852a); marsh south of Kintla L. (RHR 271, RBB 8957).
17. *Stagnicola* cf. *elrodiana* Baker 1935
Columbian dr.: Quartz L. (Swenson).
Hudsonian dr.: St. Mary's L. (RBB 4859).
18. *Stagnicola palustris* (Müller) 1774
Hudsonian dr.: Swiftcurrent L. (Lehmkuhl).
Columbian dr.: Bowman L. (CNHM 105755); Polebridge (CNHM 105863); Quartz L.; Harrison L.; Lake McDonald; Logging Cr. (Swenson); marsh south of Kintla L. (RHR 268, 127, 282, 291, RBB 3257, 9157).

Family Planorbidae

19. *Gyraulus parvus* (Say) 1817
Hudsonian dr.: Swiftcurrent L. (Lehmkuhl).
Columbian dr.: Sprague Cr.; Howe L.; Quartz L.; Fish L.; Mud L.; McDonald Cr. (Swenson); marsh near Kintla L. (RHR 275, 268, RBB 9657); Camas Cr. (RBB 24147).
20. *Helisoma anceps* (Menke) 1830 (= *H. antrosa* Conrad)
Columbian dr.: Harrison L. (Swenson); Camas Cr. (RBB 33047).
21. *Helisoma trivolvis* (Say) 1817
Columbian dr.: Polebridge (CNHM 105794); South of Kintla L. (RHR 123, 292 RBB 8557); Camas Cr.; Lake McDonald (Swenson).
22. *Menetus (Promenetus) exacuus* (Say) 1821
Columbian dr.: Polebridge (CNHM 105884); South of Kintla L. (RHR 284, 293, RBB 8757).

CLASS GASTROPODA

Family Acroloxidae

12. *Acroloxus coloradensis* (Henderson) 1930
Hudsonian dr.: Lost Lake (Russell & Brunson).

Family Ancyliidae

13. *Ferrissia parallela* (Haldeman) 1841
Columbian dr.: Fish L.; (Swenson).

9557); Fish L.; Quartz L.; John's L.; Logging Cr. (Swenson).

Missourian dr.: Kiowa (RBB 8357, 9357).

23. *Planorbula armigera* (Say) 1818
Columbian dr.: South of Kintla L. (RHR 124, 231, 290, RBB 8357, 9357).

Family Physidae

24. *Aplexa hypnorum* (Linné) 1758
Columbian dr.: Sprague Cr. (pond); Nyack Cr. (pond); Logging Cr. (Marsh) (Swenson); Polebridge (CNHM 105813, 105814); Bowman Lake (CNHM 105880); Near Kintla L. (RHR 125, 283, RBB 8657, 9457).

Hudsonian dr.: Swiftcurrent L. (Lehmkuhl).

25. *Physa gyrina* (Say) 1821
Columbian dr.: Lake McDonald; Quartz L.; Bowman Cr.; Kintla L.; Harrison L.; Three Bears L.; Logging L. (Swenson); Camas Cr. (RBB 24247); Mud L. (RBB 34247).
Hudsonian dr.: Josephine L.; Swiftcurrent L. (Lehmkuhl); Lost L. (Russell & Brunson); St. Mary's L. (RBB 34347).

Family Pupillidae

26. *Columella edentula* (Draparnaud) 1805
Columbian dr.: Lake McDonald (CNHM 105890). (See Pilsbry, 1948, for Montana).
27. *Vertigo modesta corpulenta* (Morse) 1865
Missouri dr.: Mt. Morgan trail (Berry, for *V. modesta parietalis*).
Hudsonian dr.: Gunsight trail; Grinnel Lake; Josephine L.; McDermott L.; Swiftcurrent Canyon; Granite Park Trail (Berry) (see Pilsbry, 1948, for Montana).

Family Succineidae

28. *Succinea avara* Say 1824
Columbian dr.: South of Kintla (RHR 274).

Family Endodontidae

29. *Discus cronkhitei* (Newcomb) 1864
Columbian dr.: Granite Park Trail (Berry); South of Kintla (RHR 272); Lake McDonald (CNHM 105896); Sprague Cr. (CNHM 105804); Bowman L. (CNHM 105801).
Hudsonian dr.: Swiftcurrent Canyon (Berry); St. Mary's L. (RBB 13756).
Missourian dr.: Mt. Morgan trail (Berry).
30. *Punctum californicum* Pilsbry 1898
Columbian dr.: Granite Park trail (Berry).
Hudsonian dr.: Gunsight Trail; Josephine L.; McDermott L.; Ptarmigan Falls; Swiftcurrent Canyon (Berry).
Missourian dr.: Cut Bank Cr. (Berry).

Family Vitrinidae

31. *Vitrina limpida alaskana* (Dall) 1905
Columbian dr.: Granite Park Trail (Berry, for *V. alaskana*).
Hudsonian dr.: Triple divide Pass; Josephine L.; McDermott L. (Berry); Swiftcurrent trail (RHR 155, 157); St. Mary's (RBB 14156).
Missourian dr.: Logan Pass (CNHM 105760, RBB 2460).

Family Zonitidae

32. *Pristiloma wascoense* (Hemphill) 1911
Columbian dr.: Granite Park Trail (Berry, for *Polita chersinella*); Logan Pass (RHR 160).
Hudsonian dr.: Peigan Pass Trail; McDermott L.; Swiftcurrent Canyon (Berry); Swiftcurrent Trail (RHR 159).
Missourian dr.: Mt. Morgan Trail (Berry).
33. *Retinella binneyana occidentalis* (Baker) 1930
Columbian dr.: Granite Park Trail (Berry, for *Polita binneyana*); Bowman L. (CNHM 105752).
Hudsonian dr.: St. Mary's (RBB 14256).

34. *Striatura pugetensis* (Dall) 1995
Columbian dr. Granite Park Trail (Berry, for *Striatura milium pugetensis*).
35. *Zonitoides arboreus* (Say) 1816
Columbian dr. Granite Park Trail (Berry) South of Kintla L. (RHR 273) Sprague Cr. (CNHM 105805).
Hudsonian dr. Gunsight Trail McDermott L. (Berry) St. Mary's L. (CNHM 105808)
Missourian dr. Mt. Morgan Trail (Berry).
36. *Euconulus fulvus* (Müller) 1774
Columbian dr. Sprague Cr. (CNHM 105887).
Bowman L. (CNHM 105842).
37. *Euconulus fulvus alaskensis* Pilsbry 1899
Columbian dr. Lake McDonald (CNHM 105898)
Hudsonian dr. St. Mary's (RBB 13956).
Ranges throughout the Park (Berry).

Family Limacidae

38. *Limax maximus* Linné 1758
Columbian dr.: West Glacier (RBB 5051).

Family Sagdidae

39. *Microphysula ingersolli* (Bland) 1874
Columbian dr. Granite Park Trail (Berry, for *Thysanophora ingersolli*); Logan Pass (RBB 2360, RHR 156, (CNHM 105824). Lake McDonald (CNHM 105879).
Hudsonian dr.: Gunsight Trail: Piegan Pass Ptarmigan Falls Swiftcurrent Canyon (Berry) Swiftcurrent Trail (RHR 158).
Missourian dr.: Mt. Morgan Trail (Berry).
40. *Oreohelix subrudis aptarium* Berry 1919
Columbian dr.: Granite Park Trail (Berry, for *O. cooperi aptarium*), (CNHM 106326, RBB 3054, 4159). Lake McDonald (RBB 552).

Hudsonian dr. Gunsight Trail Piegan Pass Trail (Berry) St. Mary's Lake (CNHM 106328, RHR 131 RBB 6354) Lost Lake (CNHM 105925, RHR 134) Rising Sun Camp (CNHM 106327, RHR 130) Roes Cr. (RBB 14356) Logan Pass (RBB 2260 RHR 154) Sun Point (RHR 161).

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