

## CHECKLIST OF THE NON-MARINE MOLLUSCA OF QUEBEC

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The province of Quebec is at present one of the largest political units of Canada. Its population, and particularly the cities and farms, is concentrated along the St. Lawrence and Ottawa rivers, so that mollusk records for the province are mainly from the southern third. Notable exceptions to this pattern are the records for James Bay and the Ungava Bay regions which have extended the range of many species far to the north on the mainland of North America. The Gaspé peninsula has attracted many shell collectors, a fortunate circumstance which has demonstrated the northeastern extension of dispersal of some species and added many introduced species to the Quebec list. On the other hand, the vast interior region of the province remains largely unexplored. In the past, these great expanses, abundantly provided with lakes

and rivers, were inaccessible save for costly and well-organized expeditions. Geological Survey of Canada parties have brought back valuable material from these areas but much still remains to be done to give us adequate knowledge of the molluscan fauna of this region. The situation has changed with the advent of the airplane and the opening of the iron ranges of the interior. It seems to be a good idea, at this time, to consolidate into a provisional checklist the many records for the province.

The following summary of Quebec records will, it is hoped, stimulate collectors to work in the so-far untouched areas.

As for previous lists, every effort has been made to achieve reasonable completeness but additions and corrections will be gratefully acknowledged by the writer.

## 1. NAIADES

1. *ALASMIDONTA CALCEOLUS* (Lea)  
1850. Latchford 1904: 91, south branch of the Quyon River, near Thome Centre, Co. Pontiac, one specimen. Probably a misidentification, but possible, though far out of range.

2. *ALASMIDONTA MARGINATA* (Say).  
Whiteaves 1863: 100 (*Margaritana m.*), St. Lawrence about Montreal; Yamaska R. near St. Hyacinthe, Latchford and Fletcher 1894:

98, Gatineau River at Farrelton; "Our three *Margaritana*s were found in abundance ..." Latchford 1882: 54, Rideau and Ottawa rivers, Whiteaves 1896b: 8, "small and typical eastern form" common in the province of Quebec and eastern Ontario.

3. *ALASMIDONTA UNDULATA* (Say). Whiteaves 1862: 458 (*Anodonta u.*), St. Charles R., near Quebec, Whiteaves 1863: 100 (*Margaritana u.*), common in the St. Lawrence down to Quebec.

Latchford 1882: 54, Meech Creek; Ottawa R. Latchford 1887: 114, Ottawa River at Duck Id. Latchford 1889: 66, shoals opposite Templeton Wharf; Duck Id. Latchford 1893b: 116, outlet of Harrington Lake near Alexander's Mill. Whiteaves 1895b: 9, St. Lawrence at Montreal and Quebec; near Ottawa. Latchford and Fletcher 1884: 98, Gatineau River. Latchford 1906b: 187, 188, Ottawa River, Duck Id. Nylander 1914: 140, St. John's River, Aroostook and Fish rivers; rare. La Rocque 1932: 152, Chilcott Lake.

4. *ANODONTA CATARACTA* Say. Whiteaves 1863: 100, Lac Calvaire, near Quebec; abundant in small creeks near the St. Charles River at Quebec; Brome Lake in Eastern Twps, Latchford 1882: 56, Ottawa River (rare). Latchford 1889: 66, Duck Id. Latchford 1915: 52 "at least fifty localities in Quebec and Ontario." La Rocque 1932: 152, Chilcott Lake.

5. (*Anodonta cygnea* Linnaeus). D<sup>Urban</sup> 1860: 99, Rouge River Valley, "in almost every lake we visited." By context, this is one of the common American species.

6. *ANODONTA GRANDIS BENEDICTENSIS* Lea, Whiteaves 1863: 100, Mississisquoi Bay, Lake Champlain. Latchford 1882: 56, Ottawa River, Chats; small lake on Meech Creek; outlet of Leamy's Lake. Latchford and Poirier 1885: 266, Leamy Lake, where it joins the Ottawa. Latchford 1906b: 187, 188, Duck Id.; Brigham's Creek.

7. (*ANODONTA GRANDIS DECORA* Lea), Whiteaves 1862: 458, Montreal. (Probably not a valid variety or subspecies. AL)

8. *ANODONTA GRANDIS FOOTIANA* Lea. D<sup>Urban</sup> 1860: 99, Rouge River Valley; Eagle Nest Lake, Wentworth; Sixteen Island Lake and Bevin's Lake, Montcalm. Whiteaves 1863: 100, same localities. Latchford 1882: 56, Ottawa R. at the Chats; Meech's Creek. Whiteaves 1895b: 4, three small lakes tributary to the River Rouge. Whiteaves 1863: 100 (*A. lewisii*), Lachine Canal. Whiteaves 1902: 92, Lake Abitibi,

9. *ANODONTA IMPLICATA* Say. Whiteaves 1863: 100, St. Lawrence near Quebec; Berthier. Latchford 1882: 56, Ottawa River; Chats Canal. Whiteaves 1895b: 5, St. Charles R. near Quebec.

10. *ANODONTA MARGINATA* Say. D<sup>Urban</sup> 1860: 99 (*A. fragilis*) Rouge River Valley; Eagle Nest Lake, Wentworth; Sixteen Island and Bevin's Lake, Montcalm. Latchford 1882: 56 (*A. lacustris*) small lake in Masham; (*A. fragilis*) Meech Lake, common. Poirier 1883: 74, Meech Lake. Latchford 1884: 1052 (*A. fragilis*) Anticosti. Latchford and Poirier 1885: 265, Gauvreau Lake (*A. fragilis* and *A. lacustris*). Whiteaves 1895b: 5, three small lakes in the Rouge River Valley; six miles up the Becscie River. Anticosti; Meach Lake, near Ottawa. Dall 1905: 129, St. Lawrence drainage, including the lakes; Anticosti. Schmitt 1904: 277, Lac du Grand Ruisseau, Lac Saint-Georges; nombreux lacs, étangs et cours d'eau, commune; Baie Ste-Claire, Baie du Renard. Toute l'île. Nylander 1914: 140, St. John's River and the lakes and tributaries on muddy bottom; common. Johansen 1924: 163, Lake Princeton, Anticosti.

NOTE: The genus *Anodonta* needs a thorough revision and this applies especially to the Canadian "species." It is quite possible that the forms accepted here may be reduced in future to only one or two valid species.

11. *ANODONTOIDES FERUSSACIANUS* (Lea). Whiteaves 1863: 100, creek at L<sup>Original</sup>; old stone quarries near Mile-End toll-gate, Montreal. Whiteaves 1895b: 4, Mile-End, Montreal. Ortmann 1919: 165.

12. ?*ANODONTOIDES FERUSSACIANUS MODESTUS* (Lea). Whiteaves 1863: 100, Lake St. John. A form which is scarcely worth recognizing, in my opinion.

13. ?*ANODONTOIDES FERUSSACIANUS SUBCYLINDRACEUS* (Lea). Bell 1858: 108, Lake St. John. Whiteaves 1863: 100, Lachine Canal; St. Lawrence at Quebec. Latchford 1882: 55, Ottawa River; Chats. Whiteaves 1895b: 7, Lakes Matapedia and St. John to the eastward, to creeks,



rivers and bays at the east end of Lake Superior and north side of Lake Erie to the westward. Same observation as for No. 12.

14. *ELLIPTIO COMPLANATUS* (Dillwyn). Sheppard 1830: 191 (*Unio nanca*), Island of Orleans. Bell 1858: 96 (*Unio c.*), bank of the Gouffre River; p. 97, Lake St. John. D'Urban 1860: 98, Rouge River Valley, nearly every lake in the district and the river itself. Whiteaves 1863: 99, St. Lawrence as far down as Berthier below Quebec. Heron 1880: 37, Meech Lake. Latchford 1882: Ottawa R., Meech Lake, Meech Brook. Latchford and Poirier 1885: 265, La Peche River; Gauvreau Lake; p. 264, Mohr's Wharf, Chats Falls. Latchford 1887: 114, Ottawa River, Duck Id. Latchford 1889: 66, Duck Id. "a distinct variety." Latchford 1893b: 116, outlet of Harrington Lake near Alexander's Mill; Harrington Lake. Whiteaves 1895b: 10, various localities including Lake Temiscaming. Latchford 1906b: 187, 188, Duck Id., sand bars. Nylander 1914: 140, Aroostook, Fish, and St. John's rivers; Temiscouata Lake. Ortmann 1919: 103 (*E. violaceus*). La Rocque 1932: 152, Chilcott L. Unpublished records: Gatineau River at Alcove; Meach Lake; Gauvreau Lake, Mahon Lake, in the Ottawa region.

15. *ELLIPTIO DILATATUS* (Rafinesque). Whiteaves 1863: 99, St. Lawrence and tributaries, scarce. Latchford 1882: 50 (*Unio gibbosus*) Gilmour's Mills, Templeton. Latchford 1889: 66, Duck Id. Whiteaves 1895b: 11, St. Lawrence and Ottawa rivers. Latchford 1906b: 187, 188, Duck Id.

16. *LAMPSILIS CARIOSIA* (Say). Latchford 1882: 51, Black Bay, Eardley, Que.

17. *LAMPSILIS RADIATA* (Gmelin). Sheppard 1830: 191 (*Unio r.*) beach at the Id. of Orleans. Whiteaves 1863: 99, abundant in rivers and lakes of Canada East. Latchford 1882: 50, Ottawa River, common. Latchford and Poirier 1885: 264, Mohr's Wharf, Chats. Whiteaves 1895b: 13, Nova Scotia to Ottawa. Ortmann 1919: 292.

NOTE. The writer notes current opinion that *L. radiata* and *L. siliquoidea* are synonyms. The records are listed separately here merely to indicate which name was used in the several references cited.

18. *LAMPSILIS RADIATA BOREALIS* (A. F. Gray). Latchford 1882: 52, Ottawa R.; mouth of Brigham's Creek to Templeton. Latchford 1889: 66, Duck Id. Whiteaves 1895b: 9, Duck Id. Latchford 1906b: 187, 188, sand bars, Duck Id., Ottawa River.

19. *LAMPSILIS SILIQUOIDEA* (Barnes). Whiteaves 1862: 458 (*U. luteolus*), common in the St. Lawrence, Quebec and Montreal. Whiteaves 1863: 99, Lower Canada. Latchford 1882: 51, Rideau Canal and River. Latchford and Poirier 1885: 265, Gauvreau Lake. Whiteaves 1902: 92, Ontario side of Lake Abitibi. Latchford 1915: 51, Gauvreau Lake.

20. *LAMPSILIS VENTRICOSA* (Barnes). Whiteaves 1863: 99 (*U. canadensis*), Montreal; Id. of Orleans; *U. cardium*) St. Lawrence, very fine at Quebec. Latchford 1882: 51 (*U. occidentis*) Ottawa, near mouth of Gatineau; Kettle Id.; (*U. subovatus*) Ottawa R., Deschenes L. (*U. canadensis*) St. Lawrence near Montreal; Nepean Bay, Ottawa R. Latchford 1887: 114 (*U. occidentis*) Ottawa River. Latchford 1889: 65 (*U. occidentis*) Duck Id. Whiteaves 1895b: 9 (*U. canadensis*) Ottawa R. near Ottawa; (*U. ventricosus*), p. 14, St. Lawrence and Ottawa rivers. Dall 1905: 125, St. Lawrence system. Latchford 1906b: 187, 188 (*U. occidentis*) sand bars at Duck Id. Ortmann 1919: 301 (*L. ventricosa canadensis*).

21. *LASMIGONA COMPRESSA* (Lea). Whiteaves 1862: 458, Assumption River. Whiteaves 1863: 99 (*U. alasmodontinus*) L'Assomption River; River St. Pierre, and Lachine Canal near Montreal. Latchford 1915: 52, Moore's Creek, Aylmer road, west of Hull, Quebec.

22. *LASMIGONA COSTATA* (Rafinesque). Whiteaves 1863: 99, St. Lawrence River about Montreal; Yamaska River near St. Hyacinthe. Baker 1928: 141. La Rocque 1932: 152, Chilcott Lake. Unpublished record: Gatineau River at Alcove.

23. *LEPTODEA FRAGILIS* (Rafinesque). Latchford 1882: 52 (*U. gracilis*) Ottawa R. Latchford 1887: 114, Ottawa R. Latchford 1889: 66, shoals opposite Templeton Wharf; Duck Id. Dall 1905: 127 (*Lampsilis gracilis*) St. Lawrence drainage. Latchford 1906b: 187, 188, sand bars, Duck Id. Baker 1928: 234.

24. *LIGUMIA RECTA* (Lamarck). Whiteaves 1863: 99 (*U. rectus*) St. Lawrence at Quebec and Montreal, somewhat rare. Latchford 1882: 50, Ottawa River, rare, near Arnprior. Latchford 1887: 114, Ottawa River at Duck Island. Latchford 1889: 66, Duck Id. Whiteaves 1895b: 13, St. Lawrence and Ottawa rivers. Dall 1905: 126 (*Lampsilis rectus*) St. Lawrence system. Latchford 1906b: 187, 188, sand bars, Duck Id., sparsely. Ortmann 1919: 276 (*Eurynia*). Unpublished record: Gatineau River at Alcove.

25. *LIGUMIA RECTA LATISSIMA* (Rafinesque). Baker 1928: 257. There is some doubt as to the validity of this form. By definition it is the river form and the name should be applied to all records under the species, above, except possibly some of the St. Lawrence River specimens.

26. *MARGARITIFERA MARGARITIFERA* (Linnaeus). Sheppard 1830: 191 (*Unio sinuata*), "Island of Orleans, not very common." Identified by me (La Rocque, 1935b) as *M. margaritifera* but may be another species. Packard 1863: 413 (*Alasmodonta arcuata*) Salmon River, "Labrador" and Newfoundland. Packard 1867: 280, same record. Whiteaves 1863: 99 (*Margaritana m.*) St. Charles River, near Quebec; Green and Rimouski rivers; both of the Matapedia lakes; Lake St. John. Bell 1858: 107, river at Rimouski; Lake

St. John. Latchford 1884: 1052, Fox River, Anticosti. Whiteaves 1895b: 8, Green and Rimouski rivers; Lake St. John; both the Matapedia lakes; River St. Charles near Quebec City; Assumption River near Rawdon; Lac de la Ferme, Rivière du Loup; Romaine River. Dall 1905: 132 (*Margaritana m.*) Anticosti, Quebec Province, eastern Canada. Nylander 1914: 140, Aroostook River and some of its tributaries; not seen in St. John's River tributaries above Grand Falls. Schmitt 1904: 277, Rivière de la Baie du Renard, assez rare.

27. *OBOVARIA OLIVARIA* Rafinesque. Whiteaves 1863: 99 (*Unio olivarius*), St. Lawrence at Quebec and Montreal. Latchford 1882: 50 (*U. ellipsis*), Ottawa River: below Kettle Island. Latchford 1887: 114, same. Latchford 1889: 66, same. Whiteaves 1895b: 10, Ottawa River, opposite L'Orignal; near Ottawa; St. Lawrence at Montreal; near Quebec. Latchford 1906b: 187, 188, Duck Id. Ortmann 1919: 229. Baker 1928: 214.

28. *PROPTERA ALATA* (Say). Whiteaves 1863: 99 (*Unio alatus*), Ottawa River, near Ottawa; mouth of River Rouge. Latchford 1882: 52 (same name) Ottawa R., rare. Latchford 1887: 114 and 1889: 66, Duck Island; Green's Creek. Dall 1905: 126 (*Lampsilis a.*), entire drainage of the St. Lawrence. Latchford 1906b: 187, 188 (*Unio a.*), Duck Island. Ortmann 1919: 252.

29. *PROPTERA ALATA MEGAPTERA* (Rafinesque). Baker 1928: 244. If the form is accepted as valid, all records above should be placed under this name.

30. *STROPHITUS RUGOSUS* (Swainson). D'Urban 1860: 99 (*Anodonta edentula*), Rouge River Valley, and (*Alasmodon rugosus*), same reference, same locality. Whiteaves 1863: 100 (*A. edentula*), Lake Matapedia; Brome Lake; (*A. undulata*), St. Charles River about 3 miles from Quebec. Latchford 1882: 55 (*A. undulata*), Ottawa River, Kettle Id.; p. 54 (*Margaritana rugosa*), Ottawa River: Chats Rapids; p. 55 (*A. edentula*), Ottawa River:



Little Chaudière and Chats Rapids; Mason's Mills (Snye); Meech Creek, appears identical with *A. unadilla* De Kay. Latchford 1887; 114 (*A. undulata*), Ottawa River at Duck Id., north shore. Latchford 1889; 66 (*A. undulata*), same locality. Whiteaves 1895b; 8 (*Margaritana rugosa*), widely distributed in Quebec and Ontario; p. 3 (*A. edentula*), Lake Matapedia; small lake in the valley of the River Rouge; St. Charles River near Quebec; Brome Lake. Latchford 1906b; 187, 188 (*A. undulata*), Duck Island.

## 2. SPHAERIIDAE

NOTE. This family is under revision by Herrington at present. Until his disposition of the many synonyms has been made it seems best to list the names as they appear in the literature with only such modifications as appear to be certain of final adoption, for example elimination of the genus *Musculium*.

31. *PISIDIUM ABDITUM* Haldeman, Latchford 1884; 1052, Anticosti. Whiteaves 1863; 101, Quebec, Montreal. Whiteaves 1895a; 22, foot of Lake Temiscaming. Whittaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

32. *PISIDIUM ADAMSI* (Prime). Heron 1880; 36, a little below Gatineau village on the Ottawa. Latchford 1922; 6, pond near Deschenes Rapids.

33. (*Pisidium altile* Anthony). Whiteaves 1863; 101, Mile-end, Montreal; St. Charles River, near Quebec; "It is the *P. compressum* of Prime, but Mr. Anthony's name seems to have priority." (See *P. compressum*).

34. *PISIDIUM COMPRESSUM* Prime, Latchford 1922; 5, Chilcott Lake. Whittaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

35. ?*PISIDIUM DUBIUM* (Say). D\*Urban 1860; 99, Rouge River Valley: in shell marl,

Eagle Nest Lake, and living in the small lake near Hamilton's farm.

36. *PISIDIUM MAINENSE* Sterki. Whiteaves 1905; 170, Jupiter River, Anticosti.

37. *PISIDIUM ROTUNDATUM* Prime. Taylor and Latchford 1890; 52, outlet to Leamy's Lake, Hull.

38. *PISIDIUM STEENBUCHI* (MÖLLER). Packard 1867; 280, Square Island and Strawberry Harbor, Labrador. Dall 1905; 143 (*Corneocyclas*), Ungava. Whiteaves 1901; 223, Fort Chimo, Ungava. Sterki 1916; 457. Sterki 1926; 26, Ungava, has seen no authentic specimens.

39. *PISIDIUM SUBROTUNDUM* Sterki. Latchford 1922; 6, Jupiter River, Anticosti, to the Albany and Attawapiscat rivers in northwestern Ontario.

40. ?*PISIDIUM VARIABLE* Prime. Whiteaves 1862; 458, St. Lawrence at Quebec.

41. *PISIDIUM VIRGINICUM* Gmelin. Whiteaves 1863; 101, St. Lawrence and St. Charles rivers at Quebec; Montréal; St. Lawrence River and Lachine canal.

42. ?*SPHAERIUM ACUMINATUM* Prime. Latchford 1920; 33, Lake Deschenes, various localities in Ontario, therefore probable for the Quebec side of the lake. "A mussel believed to be this species."

43. *SPHAERIUM AUREUM* Prime. Latchford 1920; 30, Moore's Creek, in Hull.

44. *SPHAERIUM CRASSUM* Sterki. Sterki 1916; 432. Latchford 1920; 30, Masham (a few shells which may be *crassum*). Baker 1928; 319.

45. *SPHAERIUM DECLIVE* Sterki. Sterki 1916; 443 (*Musculium d.*).

46. *SPHAERIUM EMARGINATUM* Prime. Latchford 1920; 33, Phillips Lake (Co. Pontiac).

47. *SPHAERIUM FLAVUM* Prime, Latchford 1920; 31, Ottawa; Sparks Mills, west of city.

48. *SPHAERIUM OCCIDENTALE* Prime. Latchford 1887; 107, Buckingham. Unpublished record; Alcove, dried bottom of pool in woods.

49. *SPHAERIUM PARTUMEIUM* (Say). D<sup>U</sup>Urban 1860; 99, Rouge River Valley, ponds and small lakes (*Cyclas partumeia*?). Taylor and Latchford 1890; 52, outlet of Leamy's Lake, Hull.

50. *SPHAERIUM RHOMBOIDEUM* (Say). Whiteaves 1862; 458, St. Lawrence at Quebec. Whiteaves 1863; 101, Montreal. Taylor and Latchford 1890; 52, outlet of Leamy's Lake, Hull. Latchford 1920; 32, pond on Duck Id.; Meach Lake.

51. *SPHAERIUM ROSACEUM* Prime. Latchford 1887; 351, eastern end of McGoey's Lake, near Chelsea. Latchford 1921; 69, bay at the east end of the pond below the outlet of Meach Lake (Id. Tryon.)

52. *SPHAERIUM SECURIS* Prime. Whiteaves 1863; 101, Montreal, Lachine. Whiteaves 1895a; 22, foot of Lake Temiscaming. Whitaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

53. *SPHAERIUM SIMILE* (Say). D<sup>U</sup>Urban 1860; 99, Rouge River Valley, living in lakes, and in shell marl, Eagle Nest Lake, Wentworth. Whiteaves 1905; 169, Lièvre River at High Rock. Unpublished records; Rouge River at St. Andrews; Chilcott Lake; Gauvreau Lake.

54. *SPHAERIUM SOLIDULUM* Prime. Whiteaves 1863; 101, creek at L<sup>O</sup>Original.

55. ?*SPHAERIUM STAMINEUM* Conrad. Latchford 1920; 33, outlet of Swan Lake in Pontiac Co., a shell doubtfully considered stamineum, but which may be an undescribed species.

56. *SPHAERIUM STRIATINUM* Lamarck. Whiteaves 1863; 101, Lachine Canal, near

Montreal; St. Lawrence and St. Charles rivers, near Quebec. Whiteaves 1895a; 22, foot of Lake Temiscaming. Whiteaves 1902; 92, Ontario side of Lake Abitibi. Nylander 1914; 140, Fish River, in St. John's River at Fort Kent, and in Madawaska River at St. Rose. Latchford 1916; 93, shores of Duck Island (*S. striatinum* var. or new). Latchford 1920; 34, sandy shoals, north shore of Duck Island.

57. *SPHAERIUM SULCATUM* Lamarck. Whiteaves 1863; 100, Metis Lakes, and a small lake six miles southwest of Métis; St. Lawrence at Montreal. Latchford and Poirier 1885; 265, Gauvreau Lake; had almost entirely disappeared. Latchford 1887; 351, McGoey's Lake, near Chelsea. Whiteaves 1895a; 22, foot of Lake Temiscaming. Latchford 1919; 84, creek 100 yards west of Ste Justine Station, Vaudreuil Co.; small lake below the outlet of Meach Lake; Gauvreau Lake. Nylander 1943; 45, marl, east Bonaventure.

58. *SPHAERIUM SULCATUM PALMATUM* Sterki. Latchford 1919; 83, Masham. A misspelling of *S. sulcatum planatum*.

59. *SPHAERIUM TENUE* (Prime). Sterki 1916; 438.

60. *SPHAERIUM TORSUM* Sterki. Sterki 1916; 434. Latchford 1916; 93, Ottawa River; Moore's Creek, abundant. Latchford 1920; 33, Moore's Creek, the type locality. Baker 1928; 331.

61. *SPHAERIUM TRANSVERSUM* Say. Whiteaves 1863; 101, Lachine Canal, near Montreal. St. Lawrence near Quebec. Latchford 1920; 70, shores of Duck Island.

62. *SPHAERIUM TRUNCATUM* Linsley. Latchford 1920; 71, Ottawa River, Nepean Bay and Duck Island.

63. *SPHAERIUM VERMONTANUM* Prime. Sterki 1916; 435. Latchford 1920; 70, Lakes Champlain, Memphremagog. Ste Cécile de Masham.



64. *SPHAERIUM WALKERI* Sterki. Whiteaves 1905: 170, headwaters of the Chibougamau branch of the Nottawa River, northern Quebec. A. P. Low, 1905.

### 3. FRESHWATER PULMONATES

65. *APEXA HYPNORUM* (Linnaeus). D'Urban 1860: 97 (*Physa elongata*), Rouge River Valley, in pools on grass, near Grenville. Whiteaves 1863: 104 (*Physa hypnorum*), Quebec and Montreal; Green Island; Metis; St. Anne. Latchford 1884: 1052 (*Bulinus*), Anticosti. Provancher 1890: 146, Lévis, etc.; Taylor and Latchford 1890: 56, Ottawa district.

66. *APEXA HYPNORUM ARCTICA* (Glessin). Walker 1918: 116, Hudson Bay.

67. *BULIMNEA MEGASOMA* (Say). Whiteaves 1863: 102, Nuns' Island, near Montreal. Small and Symes 1882: 58, Meech Lake; Nuns' Island, almost extinct. Latchford 1887: 351, McGoey's Lake, near Chelsea. Provancher 1890: 140, Lake Champlain; Hawkesbury, Ont. Latchford 1893: 115, Meach Lake. Baker 1911: 184. Latchford 1806a: 172, Meach Lake, rare. Unpublished record; Blue Sea Lake.

68. *FERRISSIA BOREALIS* (Morse). Nylander 1914: 140, St. John's River at Fort Kent.

69. *FERRISSIA PARALLELA* (Haldeman). Small and Symes 1882: 58, Ottawa River. Whiteaves 1905: 170, Aylmer; Montreal?

70. *FERRISSIA RIVULARIS* (Say). Whiteaves 1863: 104 (*Ancylus rivularis*? may be parallelus Hald.), St. Lawrence River at Quebec and Montreal; St. Charles River near Quebec. Provancher 1890: 150, Rivière St-Charles, etc. Whittaker 1922: 105, peat, Beauharnois Co.

71. *FOSSARIA EXIGUA* (Lea). D'Urban 1860: 97, Rouge River Valley, small lake near Hamilton's Farm. Whiteaves 1863: 103, quoting D'Urban.

72. *FOSSARIA GALBANA* (Say). D'Urban 1860: 97 (*Limnaea galba*), Rouge River Valley; abundant in shell marl from the bottom of Eagle Nest Lake, Wentworth. Whiteaves 1863: 103, quoting D'Urban. Dall 1905: 74, Anticosti, Pleistocene. Baker 1911: 291. Unpublished record; Chilcott Lake.

73. *FOSSARIA HUMILIS* (Say). Whiteaves 1863: 103, Green Island village; Rimouski; St. Anne; Lake Calvaire near Quebec; ponds near Mile End toll gate, Montreal (*Limnaea h.*). Provancher 1890: 144. Whiteaves 1895a: 22, foot of Lake Temiscaming. Unpubl. record, Gauvreau Lake, identification doubtful.

74. *FOSSARIA MODIGELLA* (Say). Bell 1858: 108, Lake St. John; Rimouski. Baker 1928: 289, eastern Quebec.

75. *FOSSARIA OBRUSSA* (Say). Baker 1911: 270, living.

76. *FOSSARIA PARVA* (Lea). Baker 1928: 285, James Bay southward.

77. *FOSSARIA UMBILICATA* (Say). D'Urban 1860: 97, Rouge River Valley; in pools near Grenville. Nylander 1943: 45, marl, east Bonaventure.

78. *GYRAULUS ARCTICUS* ("Beck" Möller). Whiteaves 1901b: 223, Fort Chimo. Dall 1905: 96, Fort Chimo. Walker 1918: 96, Greenland; Quebec. Baker 1928: 380.

79. (*GYRAULUS BILLINGSI* Lea). Walker 1918: 96, synonym of parvus.

80. *GYRAULUS CIRCUMSTRIATUS WALKERI* (Vanatta). Baker 1928: 379, Quebec.

81. *GYRAULUS DEFLECTUS* (Say). D'Urban 1860: 98, Rouge River Valley; Sixteen Island and Sugarbush lakes, Montcalm. Whiteaves 1862: 458, streams near Quebec. Whiteaves 1863: 104, near Quebec; Great Lake Matapedia. Latchford 1884: 1052, Anticosti. Latchford and Poirier

1885: 265, Gauvreau Lake, found in 1881, had disappeared in 1884. Whiteaves 1895a: 22, foot of Lake Temiscaming. Unpublished record, Chilcott Lake.

82. *GYRAULUS DEFLECTUS OBLIQUUS* (De Kay). Baker 1945: 70, 268, 330, 336, Taylor Lake, Masham Co.

83. *GYRAULUS HIRSUTUS* (Gould). Shepard 1830: 195, near Etchemin (*Planorbis albus*), Latchford and Poirier 1885: 266, mouth of Brigham's Creek (*P. albus*). Latchford 1893b: 115, Harrington Lake.

84. *GYRAULUS NATHORSTI* (Westerlund). Dall 1905: 96, Labrador.

85. *GYRAULUS PARVUS* (Say). Bell 1858: 105, between York River and Gaspé Basin. D'Urban 1860: 98, Rouge River Valley; shell marl, Eagle Nest Lake, Wentworth; living in lakes near Indian Village and near Hamilton's Farm. Whiteaves 1863: 104, widely distributed and plentiful throughout the district. Latchford 1884: 1052, Anticosti. Whittaker 1922: 105, peat, St. Louis de Gonzague, Beauharnois Co. Nylander 1943: 45, marl, E. Bonaventure. Baker 1945: 74, Meach Lake.

86. *HELISOMA ANCEPS* (Menke) 1830. D'Urban 1860: 98 (*Planorbis bicarinatus*), Rouge River Valley; shell marl and living, Eagle Nest Lake, Wentworth; and in a small lake near Hamilton's farm. Whiteaves 1863: 104, Quebec, a var. with transverse wrinkles... Latchford and Poirier 1884: 132 (*P. bicarinatus*), brooks in Hull and Masham. Latchford 1884: 1052, Anticosti. Latchford and Poirier 1885: 266, mouth of Brigham's Creek. Provancher 1890: 148 (*P. bicarinatus*), Cap Rouge, Ristigouche, etc. Latchford 1893a: 115, Harrington Lake. Whiteaves 1895a: 22, foot of Lake Temiscaming. Whittaker 1922: 105, peat bed, St. Louis de Gonzague, Beauharnois Co. La Rocque 1932: 152, Chilcott Lake. Unpublished records; Rouge River at St. Andrews, Argenteuil Co.; Gauvreau Lake.

87. *HELISOMA ANCEPS ANTICOSTIANUM* F. C. Baker 1945: 219, English Bay, Anticosti.

88. *HELISOMA ANCEPS LATCHFORDI* (Pilsbry). Whiteaves 1863: 104, Brome Lake (*Planorbis bicarinatus*). Heron 1880: 37, (*P. bicarinatus*), Meach Lake. Latchford and Poirier, 1884: 132, Meach Lake. Latchford 1889: 67, Meach Lake. Latchford 1893: 116, Meach and Brome lakes. Baker 1945: 128, Meach Lake; also pp. 280, 324, 344, 406. Unpublished record; Taylor Lake, id, F. C. Baker.

89. *HELISOMA ANCEPS PORTAGENSE* (F. C. Baker). Baker 1945: 406, Meach Lake. Probably a misprint for No. 88.

90. (*HELISOMA BINNEYI* Tryon). Latchford 1911a: 19, several localities in Ontario and Meach Lake, Quebec. Probably an error for *H. infracarinatum* F. C. Baker.

91. *HELISOMA CAMPANULATUM* (Say). D'Urban 1860: 98 (*Planorbis c.*), Rouge River Valley, several lakes. Whiteaves 1863: 104, near Quebec; fine at Brome Lake; common in Richelieu River at St. Johns; St. Helen's Island, Montreal; near Grenville, etc. Latchford 1884: 1052, Anticosti. Provancher 1890: 148, Montreal, Métis and Matapedia lakes, etc. Dall 1905: 90, Anticosti. La Rocque 1932: 152, Chilcott Lake. Unpublished records; Gauvreau Lake, Mahon Lake.

92. *HELISOMA CAMPANULATUM DALLI* F. C. Baker 1945: 226, Anticosti Island, in marl.

93. *HELISOMA CAMPANULATUM WISCONSINENSE* (Winslow). Whittaker 1919: 127-134. Baker 1928: 351, "probably Quebec." Unpublished record; Meach Lake.

94. (*HELISOMA CORPULENTUM* (Say)). Latchford 1889: 67, Brigham's Creek and the Peche River in Masham. Probably refers to *H. infracarinatum* F. C. Baker.

95. *HELISOMA INFRACARINATUM* F. C. Baker. Provancher 1890: 147, Ottawa River.



not found near Quebec (*Planorbis trivolvis*, superb specimens). La Rocque 1935a: 34, Gauvreau Lake. Unpublished record; Rouge River, at St. Andrews, Argenteuil Co.

96. *HELISOMA TRIVOLVIS* (Say). Bell 1858: 107, Lake Kenogami. D'Urban 1860: 98, small lake one mile west of the Indian Village on the Rouge, Arundel Twp. Whiteaves 1863: 104, St. Lawrence at Montreal (*P. lentus*) and common throughout Lower Canada (*P. trivolvis*). Latchford and Poirier 1885: 226, mouth of Brigham's Creek, Gauvreau Lake, Mohr's Wharf, Chats, Provancher 1890: 147, Montreal. Whiteaves 1895a: 22, foot of Lake Temiscaming. Nylander 1943: 45, marl, E. Bonaventure. Unpublished records; Kettle Island, Ottawa River; Meach Lake; Mahon Lake. La Rocque 1932: 152, Chilcott Lake.

97. *HELISOMA TRIVOLVIS MACROSTOMUM* (Whiteaves). Whiteaves 1863: 104, ponds near the Mile-end toll-gate, Montreal (*Planorbis macrostomus*). Provancher 1890: 147, Cap Rouge. Whiteaves 1895a: 22, foot of Lake Temiscaming. Baker 1945: 147, Gauvreau Lake; also pp. 294, 412.

98. ?*LAEVAPEX FUSCA* (Adams). Whiteaves 1863: 104, ponds near Mile End toll-gate, Montreal (*Ancylus fuscus*?). The original record was doubtful and it is quite likely that it was erroneous. No further record for the province is known to me.

99. ?*Limnaea altemata*, or a new species. Whiteaves 1863: 103, Point Lévis. This record probably belongs under one of the many *Limnaeidae* recorded for Quebec but it would be difficult to place it definitely.

100. *LYMNAEA STAGNALIS* (Linnaeus), undifferentiated as to variety or form. Sheppard 1830: 196, abundant at Sorel. Whiteaves 1863: 102, common at Montreal in the St. Lawrence but rare at Quebec, Métis lakes and lakes on the Rimouski River. Latchford 1884: 1052, Anticosti. Provancher 1890: 139, Quebec, Bécancour. Nylander 1943: 45, marl, E. Bonaventure.

101. *LYMNAEA STAGNALIS JUGULARIS* (Say). Heron 1880: 37, Rideau Canal, but common elsewhere. Latchford 1893a: 118, Chilcott's Lake, Masham, albino. Latchford 1911b: 68, Ottawa River, Hull. Whittaker 1922: 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co. La Rocque 1935a: 34, Ottawa and Gatineau rivers; Mahon, Chilcott, Moncrief, Lamey, Constance, Fairy, and Johnston lakes. Unpublished records; Ile St. Paul, Montreal; Rouge River at St. Andrews, Argenteuil Co.; Meach Lake; six miles up Becscie River, Anticosti, young specimen, form doubtful.

102. *LYMNAEA STAGNALIS LILLIANAE* F. G. Baker. Latchford 1893b: 115, Harrington Lake, Meach Lake. La Rocque 1935a: 34, Bernard, Meach, Phillip Lakes.

NOTE. Some of the specimens on which the above records are based have been examined by me and assigned to forms following Baker's criteria. Those records for which specimens were not available, or for which assignment was doubtful, have been placed under the species (No. 100).

103. *PHYSA ANCILLARIA* (Say). Bell 1858: 107, Rimouski. Whiteaves 1863: 103, St. Charles River near Quebec; near Montréal; Rimouski village (Id. Clench). Latchford and Poirier 1885: 264, around the islands at the foot of the Little Chaudière, depauperate form. Provancher 1890: 145, rare around Quebec City. Nylander 1914: 141, Temiscouata Lake.

NOTE. Records for *Physa* have been given here under several names which probably represent only one or two species. Until the synonymy of the genus is definitely cleared up, this method of presenting the records seems to be best.

104. *PHYSA BREVISPIRA* Lea. Walker 1918: 108, Quebec, no specific locality.

105. *PHYSA ELLIPTICA* (Lea). Bell 1858: 108, Lake St. John. D'Urban 1860: 97, Rouge River Valley. Unpublished records; Montmagny (id. W. J. Clench); Ottawa River at Lemieux Id. (id. W. J. Clench).

106. ?*PHYSA ELLIPTICA AUREA* Lea. Bell 1858; 107, Rimouski River and in a tributary brook. D\*Urban 1860; 97, Rouge River Valley; sparingly in a small lake near Hamilton's Farm, Whiteaves 1863; 104, Rimouski Co., several localities; near Quebec.

107. (*PHYSA FONTINALIS*). Sheppard 1830; 195, Island of Orleans.

NOTE. I have placed this record in parentheses as improbable, but without being able to place it under an American species. Perhaps, after all, this European species was introduced here.

108. *PHYSA HETEROSTROPHA* Say. Bell 1858; 107, ditches. D\*Urban 1860; 97, Rouge River Valley, pools on grass near Grenville, and Sugarbush Lake, Montcalm. Packard 1863; 424, south side of Anticosti. Whiteaves 1863; 103, common throughout Lower Canada. Latchford 1884; 1052, Anticosti. Latchford and Poirier 1885; 264, around the islands at the foot of the Little Chaudière, a depauperate form; mouth of Brigham's Creek; La Peche River; Scott's Creek, near Hull. Provancher 1890; 145, Magdalen Islands; Hanham 1893; 66, Gaspé Basin (most likely h.). Whiteaves 1895a; foot of Lake Temiscaming. Dall 1905; 101, Anticosti, etc. Nylander 1914; 140, Maine, near Quebec border. Schmitt 1904; 279, Anticosti. Unpublished record; Île St. Paul, Montreal (id. Clench); Anticosti (id. Clench).

109. *PHYSA LATCHFORDI* F. C. Baker (or *PHYSA PARKERI* (Currier) fide Clench). Heron 1880; 37 (*P. lordi*), Meech Lake; also p. 62, fig. Latchford and Poirier 1887; 351, McGoeys Lake, near Chelsea. Latchford 1889; 67, Meach Lake. Latchford 1893b; 116, outlet of Harrington Lake, near Alexander's Mill; Meach Lake; Harrington Lake. Provancher 1890; 145, Brome Lake. All these records under *P. lordi*. Whiteaves 1906; 115 (*P. ancillaria*, large form, id. Dall), Meach Lake. La Rocque 1932; 152, Chilcott Lake, young, doubtful. Specimens in the National Museum of Canada, the Fairbairn collection, and my own have been identified as *P. parkeri* by Clench.

110. (*Physa marginata* Lea). Whiteaves 1863; 104, near Rimouski Village.

111. *PHYSA SAYII* Tappan. Nylander 1914; 141, Maine and New Brunswick, near Quebec border. Unpublished record; Johnston Lake, Masham Co., id. Clench.

112. (*PHYSA SUBOPACA*). Sheppard 1830; 195, Island of Orleans.

113. *PLANORBULA ARMIGERA* (Say). Whiteaves 1862; 458, near Quebec. Whiteaves 1863; 104; Montreal, Nuns' Island, ponds on top of Montreal Mountain. Heron 1880; 37, no specific locality, but Ottawa District. Provancher 1890; 149, Quebec, Gaspé, Anticosti, etc.

114. *PROMENETUS EXACUOUS* (Say). Sheppard 1830; 195, water near Etchemin (*Planorbis spirorbis*). Whiteaves 1863; 104, swamps near the City Mills, Montreal (*Planorbis exacutus*). Taylor and Latchford 1890; 56, no specific locality. Whittaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

115. *PSEUDOSUCCINEA COLUMELLA* (Say). Whiteaves 1862; 458, St. Lawrence near Quebec. Whiteaves 1863; 102, same. Latchford and Poirier 1884; 132, Ottawa River. Provancher 1890; 140, Cap Rouge, Ottawa, etc. Baker 1928; 272. Unpublished record; Gauvreau Lake.

116. (*STAGNICOLA AMPLA* Mighels). Whiteaves 1863; 102 (*Limnaea a.*), Brome Lake. Provancher 1890; 140, Lakes Métis and Brome. Probably forms of *S. emarginata*, q. v.

117. *STAGNICOLA ANTICOSTIANA* (Dall). Dall 1905; 79, Pleistocene marl of Marl Lake, Anticosti. Baker 1911; 106, Pleistocene.

118. ?*STAGNICOLA APICINA* (Lea). Bell 1858; 107, brook tributary of Rimouski River. Record very probably erroneous.

119. *STAGNICOLA CAPERATA* (Say). Bell 1861; 43, ponds on top of Montreal Mountain, Mr. Peel's clay pits, Montreal. Whiteaves



1863; 103, St. Charles River, near Quebec. Heron 1880; 39, Ottawa district. Latchford and Poirier 1885; 264, Mohr's Wharf, Chats, Provancher 1890; 143, British Columbia, Hudson Bay. Baker 1911; 225. Baker 1928; 260.

120. *STAGNICOLA CATASCOPIUM* (Say). Bell 1858; 105, Dartmouth River a few miles above its mouth, Gaspé Bay; p. 107, brook tributary to Rimouski River. Whiteaves 1863; 103, St. Charles River, near Quebec; Cap Rouge. Heron 1880; 39, Ottawa District. Small and Symes 1882; 58, Brigham's Creek; Nepean Bay, Ottawa River; Chats Rapids, near Arnprior. Latchford and Poirier 1885; 264, Mohr's Wharf, Chats; p. 266, Brigham's Creek. Provancher 1890; 143, Cap Rouge. Hanham 1893; 66, Gaspé Basin. Dall 1905; 78, Ungava. Latchford 1911b; 68, Little Chaudière Rapids, formerly identified as *L. decollata*.

121. *STAGNICOLA DECOLLATA* (Mighels). Whiteaves 1863; 102, Great Lake Matapedia; Rimouski Village; Provancher 1890; 140, Canada, Maine, etc.

122. *STAGNICOLA DESIDIOSA* (Say). Whiteaves 1863; 103, Upper Lake Metis; Marl Lake, Anticosti (the var. *acuta*, which probably belongs under *S. anticostiana*, A.L.). Heron 1880; 39, Ottawa district. Latchford and Poirier 1885; 265, Gauvreau Lake. Provancher 1890; 142, Métis Lake; Anticosti. Hanham 1893; 66, Gaspé Basin. Whiteaves 1895a; 22, foot of Lake Temiscaming.

123. *STAGNICOLA EMARGINATA* (Say). Small and Symes 1882; 58, Ottawa and Rideau rivers. Latchford 1884; 1052, Anticosti (probably *S. anticostiana*, A.L.). Latchford and Poirier 1885; 264, Scott's Creek, near Hull. Provancher 1890; 143, Cap Rouge. Nylander 1914; 140, Maine and New Brunswick, near Quebec border.

124. *STAGNICOLA EMARGINATA CANADENSIS* (Sowerby). Baker 1911; 427, Nylander 1914; 140, Temiscouata Lake. Baker 1928; 239, Anticosti Island westward and southward.

La Rocque 1932; 152, Chilcott Lake (as *S. e-marginata laurentiana* Latchford).

125. *STAGNICOLA EMARGINATA MIGHELSI* (Binney). Dall 1905; 68, Brome Lake. Baker 1910; 59, Brome Lake (as *Lymnaea e. wisconsinensis*). Baker 1911; 416, 420, corrected to *S. e. mighelsi*.

126. ?*STAGNICOLA GROENLANDICA* (Beck). Bell 1858; 105, between York River and Gaspé Basin. Probably a misidentification.

127. (*STAGNICOLA LANGEATA* Gould). Taylor and Latchford 1890; 52, Ottawa district, "were young *L. stagnalis*." Latchford 1911b; 68, *Lymnaea lanceata* Gould should be dropped from the Ottawa list.

128. (*STAGNICOLA LEPIDA* Gould). Small and Symes 1882; 58 (*Limnaea lepida*), Meach Lake, id, Tryon. Erroneous record.

129. *STAGNICOLA ORONENSIS* (Baker). Latchford 1911b; 68 (*Galba o.*). Ottawa district.

130. *STAGNICOLA PALLIDA* (Adams). Whiteaves 1863; 103, Great Lake Matapedia; Cape Chat.

131. *STAGNICOLA PALUSTRIS* (Müller). Sheppard 1830; 196, Quebec, "ponds formed by the melted snow in the spring." Latchford 1884; 1052, Anticosti. Latchford and Poirier 1885; 264, Ottawa district. Provancher 1890; 141, Hull. Hanham 1893; 66, Gaspé Basin. Baker 1911; 298, Whittaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

132. *STAGNICOLA PALUSTRIS ELODES* (Say). Whiteaves 1863; 103, common everywhere. Heron 1880; 39, Ottawa District. Unpublished record; Kettle Island, Ottawa River, id. F. C. Baker.

133. *STAGNICOLA PALUSTRIS UNGAVA* (Baker). Whiteaves 1901b; 222 (*Limnaea palustris* var. *Vahllei*), specimens in National Museum of Canada (3271) id. by F. C. Baker, 1934.

134. ?*STAGNICOLA PLIGATA* (Lea). D<sup>U</sup>Urban 1860; 97, Rouge River Valley, on dead leaves in Sugarbush Lake, Montcalm.

135. *STAGNICOLA REFLEXA* (Say). D<sup>U</sup>Urban 1860; 97, Rouge River Valley, near Grenville. Whiteaves 1863; 102, Upper Metis Lake. Provancher 1890; 141, Ste Louise. Baker 1911; 332. Baker 1928; 221, eastern Quebec west to Nebraska.

136. (*STAGNICOLA ROWELLI*). Provancher 1890; 142, St. Césaire, Yamaska River. (Erroneous record. A.L.)

137. *STAGNICOLA SOLIDA* (Lea). Whiteaves 1863; 103, St. Lawrence at Quebec; Métis; Rimouski; White rivers. Provancher 1890; 144, British Columbia.

138. *STAGNICOLA UMBROSA* (Say). Bell 1858; 100, Magdalen River; p. 105, York River (like *umbrosa* but regarded by Lea as new). Bell 1861; 43, Montreal, ponds on top of Montreal Mountain. Whiteaves 1863; 102, Point Lévis; Montreal Mountain; Ste Anne; creek about two miles below Chat River; Metis and Restigouche rivers. Heron 1880; 39, Ottawa District.

#### 4. FRESHWATER OPERCULATES

139. ?*AMNICOLA DECISA* Haldeman. Small and Symes 1882; 57, Leamy's Lake, Hull. Record never confirmed.

140. *AMNICOLA INTEGRATA* Say. Taylor and Latchford 1890; 55 (*Amnicola cincinnatiensis* Anth.). Ottawa District.

141. *AMNICOLA LIMOSA* (Say). NOTE: records under the species include the many citations for the "var." *porata*. Whiteaves 1863; 102, Lake Calvaire, near Quebec; Little Lake Matapedia; near Montreal. Small and Symes 1882; 57, several lakes in Ottawa County. Latchford and Poirier 1885; 265, Gauvreau Lake. Provancher 1890; 97,

Lac Calvet à St-Augustin. Taylor and Latchford 1890; 55, Ottawa District. Whiteaves 1895a; 22, foot of Lake Temiscaming. Whittaker 1922; 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co. La Rocque 1932; 152, Chilcott Lake.

142. ?*AMNICOLA PALLIDA* Haldeman. Taylor and Latchford 1890; 52, 55, "local specimens of this species are in the Geological and Natural History Museum."

143. *AMNICOLA WALKERI* Pilsbry. Baker 1928; 114, "Upper St. Lawrence drainage from Ottawa, Ontario, to Lake Michigan."

144. *BULIMUS TENTACULATUS MAGNALA-CUSTRIS* F. C. Baker. Baker 1928; 81, Ottawa River. La Rocque 1935a; 34, Duck Island; foot of Bank Street, Ottawa. (The variety is probably invalid. A.L.)

145. *CAMPELOMA DECISUM* (Say). ?Shepard 1830; 196, island of Orleans; identification doubtful. "Paludina ----?" which might be interpreted as this species. D<sup>U</sup>Urban 1860; 98, Rouge River Valley; Ottawa River; St. Lawrence River. Whiteaves 1863; 101, common throughout the district; St. Lawrence, about Montreal. Heron 1880; 36, in all rivers and ponds about Ottawa. (All preceding records under *Paludina*). Latchford and Poirier 1885; 265, Gauvreau Lake, rare. Provancher 1890; 100 (*Paludina*), Bécancour River, Montreal, etc. Taylor and Latchford 1890; 55, La Rocque 1932; 152, Chilcott Lake. Unpublished records; Gauvreau Lake; Gatineau River at Alcove; Rouge River at St. Andrews, Co. Argenteuil.

146. ?*CAMPELOMA RUFUM* Haldeman. Latchford and Poirier 1885; 266, La Peche River beyond Masham Mills. Probably based on a rusty specimen of *C. decisum*.

147. *GONIOBASIS HALDEMANI* Tryon. Provancher 1890; 94, Montreal, Varennes, Lake Champlain.

148. *GONIOBASIS LIVESCENS* (Menke). Heron 1880; 37 (*Melania*), Ottawa River. Provancher



1890: 94, Cap Rouge, and almost all our rivers. Taylor and Latchford 1890: 55.

149. *GONIOBASIS LIVESCENS NIAGARENSIS* Lea. Whiteaves 1863: 102 (*Melania n.*), St. Lawrence from Quebec to Montreal.

150. *?LITTORIDINA TENUIPES* Haldeman. Whiteaves 1863: 102, St. Lawrence near Quebec. The record is not impossible, but it has not, to my knowledge, been confirmed.

151. *?LYOgyrus GRANUM* Say. Provancher 1890: 97, no specific locality, but presumably Quebec.

152. *PLEUROCERA ACUTUM* Rafinesque. Whiteaves 1863: 102 (*Melania subularis* Lea), St. Lawrence at Montreal.

153. *?POMATIOPSIS LAPIDARIA* (Say). Provancher 1890: 98, no specific locality but presumably Quebec. Taylor and Latchford 1890: 55, doubtful for Ottawa region, referring to Heron 1880: 39, listed as "*Amnicola lapidaria?* Hald." simply for Ottawa.

154. *VALVATA BICARINATA NORMALIS* Walker. Whittaker 1922: 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co.

155. (*VALVATA HUMERALIS* Say). Whiteaves 1863: 102, Matane; small lake at the head of Awaganasees brook; and Little Lake Matapedia. This record probably belongs under *V. lewisii* or *V. sincera*.

156. *VALVATA LEWISII* Currier. Whiteaves 1905: 64, Fort Chimo, Ungava, as northeasternmost known record, but not Anticosti. Fairbairn Collection, No. 301, Ottawa River below Chaudière Falls, id. A. L.

157. *VALVATA SINCERA* Say. Whiteaves 1863: 102, Marl Lake, Anticosti. Latchford 1884: 1052, Anticosti. Taylor and Latchford 1890: 55, Ottawa. Whiteaves 1895a: 22, foot of Lake Temiscaming. Walker 1906: 28, Anticosti, teste Dall and Walker. Schmitt 1904:

279, Anticosti, ponds and lakes, common. Whiteaves 1905: 65, Anticosti; Attawapiskat and Kawinogans rivers and the southwest point of Anticosti; the former records refer to partially uncoiled specimens. Dall 1905: 122, same records. Whiteaves 1901b: 223, three lakes in Co. Rimouski; Lachine Canal at Montreal; Anticosti; shell marls in Quebec and Ontario from Anticosti to Owen Sound (Ontario). Whiteaves 1901b: 223, Fort Chimo. Whittaker 1922: 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co. Baker 1928: 23, Anticosti and Maine westward.

158. *VALVATA TRICARINATA* Say. D<sup>U</sup>Urban 1860: 98, Rouge River Valley; shell marl, bottom of Eagle Nest Lake, Wentworth. Whiteaves, 1863: 102, Quebec. Heron 1880: 36, Ottawa. Provancher 1890: 99, Lake Champlain, Quebec, etc. Taylor and Latchford 1890: 55, Ottawa. Whiteaves 1895a: 22, foot of Lake Temiscaming. Whittaker 1922: 105, base of peat bed, St. Louis de Gonzague, Beauharnois Co. Unpublished record: Chilcott Lake.

##### 5. LAND GASTROPODA

159. *ANGUISPIRA ALTERNATA* (Say). Shepard 1830: 194 (*Corocolla dubia*), on the bank near the plains of Abraham, Quebec. Bell 1858: 100 (*Helix alternata*), mouth of Magdalen River; p. 107, Chicoutimi. D<sup>U</sup>Urban 1860: 97, Rouge River Valley, abundant. Whiteaves 1863: 106, everywhere in Lower Canada. Heron 1880: 40, Ottawa. Provancher 1890: 119, rare near Quebec. Taylor and Latchford 1890: 57, Ottawa. Hanham 1893: 66, Barachois (*Patula a.*). Whiteaves 1895a: 22, foot of Lake Temiscaming. Hanham 1897: 99 (*Pyramidula a.*), common on side of cliff, Isle d<sup>U</sup>Orleans. Dall 1905: 49, Lower Canada (*Pyramidula a.*).

160. *ARION CIRCUMSCRIPTUS* Johnston. Dundee and Dundee 1958: 52, Quebec; good summary of distribution in North America.

161. *CARYCHIUM EXIGUUM* Say. D<sup>U</sup>Urban 1860: 97, Rouge River Valley, Sixteen Island Lake. Whiteaves 1863: 107, quoting D<sup>U</sup>Urban.

Heron 1880: 38, Ottawa District. Provancher 1890: 137, Canada, etc. Hanham 1893: 66, Barachois. Hanham 1897: 102, locality unspecified. Vanatta 1914: 223, Grindstone Island, Magdalen Islands.

162. *CARYCHIUM EXILE* H. C. Lea. La Rocque 1935a: 34, Wakefield; Fairy Lake, Hull.

163. *CARYCHIUM EXILE CANADENSE* (Clapp). La Rocque 1935a: 34, Wakefield.

164. *CEPAEA HORTENSIS* (Müller). Sheppard 1830: 194, bank near the plains of Abraham. Bell 1858: 56, Brandy Pots Id., Hare Id.; *ibid.*, p. 100; mouth of Magdalen River; p. 101, five miles up Magdalen River; p. 105, Ruisseau de la Grande Carrière, between Gaspé Bay and Griffon Cove on the St. Lawrence (? AL). Whiteaves 1863: 105, extending from Métis to Gaspé Bay. Hanham 1893: 66, Barachois. Hanham 1897: 98, introduced at Quebec, plains of Abraham (cf. Sheppard record, above). Schmitt 1906: 279, Anticosti, very common. Provancher 1890: 124, Cap Rouge; Lyster, Anticosti; Magdalen Ids., recorded as *Helix nemoralis*. Dall 1905: 20, Anticosti; Barachois; Gaspé. Johnson 1906: 73, Quebec; p. 74 (*Helix subglobosa*), shore of St. Lawrence, 200 miles below Quebec (quoting De Kay); p. 75, Gaspé; along the St. Lawrence (quoting Binney and Bland); p. 78, Gaspé; Percé; Barachois; Gaspé Basin; p. 78, Anticosti; Wreck Harbor, East Cape. Vanatta 1914: 223, Magdalen Ids.; Basin, Grindstone, and Allright. De Champlain 1929: 102, Rimouski; Percé at 1,200 ft.

165. *CEPAEA NEMORALIS* (Linnaeus). Packard 1863: 424, Anticosti; Magdalen Ids.; Entry Id. Latchford 1884: 1052 (*Helix hortensis*). Anticosti (corrected later to *C. nemoralis*).

166. *CIONELLA LUBRICA* (Müller). D\*Urban 1860: 97, Rouge River Valley. Packard 1863: 424, Magdalen Ids.; Entry; Mingan Ids.; Niapisca Id. Whiteaves 1863: 106, Rivière du Loup; Trois Pistoles; Métis Lakes and along the

Restigouche; Montreal Mountain. Packard 1867: 290, Mingan Ids. Latchford 1884: 1052, Anticosti. Latchford and Poirier 1885: 224, six miles from Ottawa; New Edinburgh; Hull. Taylor and Latchford 1890: 58, Ottawa District. Hanham 1893: 66, Barachois. Hanham 1897: Isle d'Orléans. Vanatta 1914: 223, Magdalen Ids.; Basin, Grindstone. Hart 1929: 104, Abitibi region.

167. *COLUMELLA EDENTULA* (Draparnaud). Whiteaves 1863: 107, Rivière du Loup; valley of the Marsouin; along the Restigouche; at Métis. Heron 1880: 40, Ottawa District. Latchford 1885: 227, Hull. Provancher 1890: 130, Canada. Hanham 1897: 101, Island d'Orléans. Vanatta 1914: 223, Magdalen Ids.; Basin Id.

168. *DEROCERAS LAEVE* (Müller). Packard 1863: 424, Anticosti. Whiteaves 1863: 105, Lower Canada, abundant. Heron 1880: 39, Ottawa District. Provancher 1890: 133, unspecified. Hanham 1893: 66, Barachois. Hanham 1897: 98, Quebec District. (All cited under *Limax campestris*). Schmitt 1904: 279, Anticosti, rare (*Agriolinas borealis* Westerlund). Dall 1905: 45 (*Agriolimax hyperboreus* Westerlund), Ungava; Labrador. Hart 1929: 104 (*Agriolimax campestris*), Abitibi region, plentiful.

169. *DEROCERAS RETICULATUM* (Müller). Packard 1867: 289, Labrador; Strawberry Harbor and Square Island (*Limax agrestis*). Provancher 1890: 133, imported from Europe (same name). Hanham 1897: 98, Quebec District (same name). Dall 1905: 45, Ungava (same name). Unpublished record; Hillcrest Farm, Shawville, Que., in cellar, 1940.

NOTE. All the above records are assumed to refer to *D. reticulatum*, but the possibility remains that some may be genuine *D. agreste* (Linnaeus). A.L.

170. *DISCUS CRONKHTEI* (Newcomb). Bell 1858: 100, mouth of Magdalen River (*Helix striatella*); p. 101, Magdalen River (same name); p. 108, Lake St. John (same name); D\*Urban 1860: 97, Rouge River Valley (same name). Packard 1863: 424, Magdalen Ids.:



Entry Id.; Mingan Ids.; Fright and Niapisca Ids. (same name). Whiteaves 1863; 106, Lower Canada, common everywhere (same name). Packard 1867; 290, Mingan Ids. (same name). Heron 1880; 40, Ottawa District (same name). Latchford 1884; 1052, Anticosti (Patula striatella). Latchford and Poirier 1885; 264, Woods, Chats, (same name). Provancher 1890; 129, unspecified locality (same name). Hanham 1893; 66, Barachois (same name). Hanham 1897; 99 (Pyramidula striatella). Quebec District, Vanatta 1914; 223 (P. cronkheitei anthonyi). Magdalen Ids.; Grosse Isle, Basin Id., East Cape, Coffin Id., Grindstone Id., Hart 1929; 104, Abitibi region (same name).

171. *EUCONULUS CHERSINUS* (Say). D<sup>Urban</sup> 1860; 97, Rouge River Valley (Helix). Packard 1863; 424, Mingan Ids., Fright Id. Packard 1867; 290, Mingan Ids., Whiteaves 1863; 106, Quebec. Heron 1880; 40, Ottawa District.

172. *EUCONULUS FULVUS* (Müller). Bell 1858; 100 (Helix egena), mouth of Magdalen River. Packard 1867; 289 (Conulus Fabricii), Strawberry Harbor. Latchford 1884; 1052 (Conulus fulvus), Anticosti. Latchford and Poirier 1885; 264, Woods, Chats, same name. Provancher 1890; 115, Hull. Hanham 1893; 66, Barachois. Hanham 1897; 99, Quebec Region. Vanatta 1914; 223, Magdalen Ids., Basin, Grindstone. Hart 1929; 104, Abitibi region.

173. *GASTROCOPTA ARMIFERA* (Say). Whiteaves 1862; 458, Cove Fields, Quebec. Whiteaves 1863; 106, Plains of Abraham, Quebec. Latchford 1885; 225, Hull. Provancher 1890; 129, Plains of Abraham. Hanham 1897; 101, Island of Orleans; Lévis.

174. *GASTROCOPTA CONTRACTA* (Say). Whiteaves 1862; 458, Island of Orleans. Whiteaves 1863; 106, same locality. Heron 1880; 40, Ottawa District. Latchford and Poirier 1885; 265, Woods, Chats. Provancher 1890; 129, Ile d'Orléans.

175. *GASTROCOPTA CORTICARIA* (Say). Heron 1880; 40, Ottawa District. Taylor and Latchford 1890; 57, listed only.

176. *GASTROCOPTA HOLZINGERI* Sterki. Taylor 1893b; Hull side of the Ottawa River (Pupa Helyingeri).

177. *GASTROCOPTA PENTODON* (Say). Heron 1880; 40, Ottawa District. Provancher 1890; 129, locality unspecified. Vanatta 1914; 223, Magdalen Ids., Grindstone Id., Latchford and Fletcher 1884; 97, Hull (Pupa curvidens). Taylor and Latchford 1890; 58 (Vertigo curvidens), Ottawa District. Hanham 1897; 101, Id. of Orleans (same name). Latchford 1884; 1052 (Vertigo pentodon), Anticosti. Hanham 1897; 101, same name, Id. of Orleans.

178. *HAPLOTREMA CONGAVUM* (Say). D<sup>Urban</sup> 1860; 96, Rouge River Valley. Whiteaves 1863; 106, Lower Canada. Provancher 1890; 110, Cap Rouge; Hull, etc. Latchford 1884; 1052, Anticosti. Hanham 1897; 98, Quebec City.

179. *HAPLOTREMA CONGAVUM MINUS* (Ancey). Heron 1880; 40 (Helix concava), H. B. Baker 1930; 412, Ottawa.

180. *HAWAIIA MINUSCULA* (Binney). Small and Symes 1882; 59, Eardley (Zonites m.). Latchford 1885; 2; 214, same locality, same name.

181. *HELICODISCUS PARALLELUS* (Say). D<sup>Urban</sup> 1860; 97, Rouge River Valley (Helix lineata). Packard 1863; 424, Magdalen Ids., Entry Id. Whiteaves 1863; 106, throughout the district, but not abundant. Heron 1880; 40, Ottawa District (Helix lineata). Latchford 1884; 1052, Anticosti, same name. Provancher 1890; 111, Gaspé to Texas. Hanham 1893; 66, Barachois. Hanham 1897; 99, Quebec District. Vanatta 1914; 223, Magdalen Ids., Basin, Grindstone.

182. *HYGRONIA STRIOLATA* (C. Pfeiffer). Whiteaves 1862; 458, Cove Fields, Quebec (H. rufescens). Whiteaves 1863; 106, Quebec,

same name. Latchford 1893c: 132, Id. of Orleans, same name; introduced at Ottawa. Hanham 1897: 99, Quebec, St. Sauveur, St. Charles River, Id. of Orléans, Lévis.

183. *LIMAX FLAVUS* Linnaeus. Provancher 1890: 132, Canada, presumably Quebec.

184. *MESODON SAYANUS* (Pilsbry). D'Urban 1860: 97, Rouge River Valley (*Helix Sayii*). Whiteaves 1863: 105, Id. of Orleans, Montreal Mountain, near Brome Lake., Restigouche River, Grenville, same name. Heron 1880: 37, Ottawa District, same name. Poirier 1883: 74, Beaver Meadow, Hull (*Mesodon Sayii*). Latchford and Poirier, 1885: 264, Hull; p. 264, Kingsmere. Provancher 1890: 124, usually near brooks. Hanham 1897: 100, Quebec District; Island of Orleans.

185. *MESODON THYROIDUS* (Say). Provancher 1890: 123, Cap Rouge. Taylor and Latchford 1890: 57, Ottawa District.

186. *MESODON ZALETUS* (Binney). D'Urban 1860: 96, Rouge River Valley. Whiteaves 1863: 105, Montmorency Falls. Provancher 1890: 122, Cap Rouge.

187. *MESOMPHIX INORNATUS* (Binney). Heron 1880: 40, Ottawa District. Latchford and Poirier 1885: 264, Kingsmere. Provancher 1890: 112, Hull.

188. *MONACHA CANTIANA* (Montagu). Latchford 1893c: 132, Quebec, introduced at Ottawa. Provancher 1890: 127, not found at Quebec. Hanham 1897: 99, common on cliff bordering Plains of Abraham and extending to the citadel.

189. *OXYCHILUS CELLARIUS* (Müller). Whiteaves 1863: 106, Montréal. Provancher 1890: 112, Montreal. Hanham 1897: 98, Isle d'Orléans; St. Charles River. La Rocque 1935a: 34, Ottawa.

190. *?OXYCHILUS DRAPARNALDI* (Beck). Bell 1858: 100, mouth of Magdalen River. The record is questioned here because the lo-

cality seems so far from the urban environment preferred by this species.

191. *OXYLOMA RETUSA* (Lea). Whiteaves 1863: 105, banks of St. Charles River near Quebec; Métis; Matane; Ste Anne (*Succinea ovalis* Gould). Latchford 1884: 1052, Anticosti, same name. Latchford and Poirier 1884: 130, Hull, same name. Provancher 1890: 135, no locality specified. Nylander 1914: 141, common around Temiscouata Lake. Vanatta 1914: 223, Magdalen Ids.: Grindstone Id. Hart 1929: 104, Abitibi region. La Rocque 1932: 152, Chilcott Lake (as *Pseudosuccinea columella*, in error).

192. *OXYLOMA VERRILLII* (Bland). Packard 1867: 290, Mingan Ids. Latchford 1884: 1052, Anticosti. Provancher 1890: 136, Anticosti. Dall 1905: 57, Anticosti, young or dwarf form.

193. *?PALLIFERA DORSALIS* Binney. Latchford and Poirier 1885: 264, Kingsmere, doubtful. Taylor and Latchford 1890: 57, doubtful, same locality.

194. *?PARAVITREA CAPSELLA* (Gould). Whiteaves 1862: 458, Id. of Orleans, rare. This may be a misidentification; it was never confirmed.

195. *PARAVITREA LAMELLIDENS* (Pilsbry). Walker 1900: 94, Ottawa? received from G. C. Heron. Walker does not state whether this was from the city of Ottawa itself, or from the Ottawa region. If the latter, there is a good chance that the locality was in Quebec.

196. *PHILOMYCUS CAROLINENSIS FLEXUOLARIS* Rafinesque. D'Urban 1860: 96, Rouge River Valley. Whiteaves 1863: 105, Point Lévis. Heron 1880: 39, Ottawa District. Latchford and Poirier 1885: 265, Woods, Chats. Provancher 1890: 134, Canada to Texas, rare. Hanham 1897: 99, Quebec City and district, occasional.

197. *PLANOGYRA ASTERISCUS* (Morse). Whiteaves 1863: 106, Valley of the Marsouin River. Provancher 1890: 120, Gaspé to Lake



Superior and all New England. Hanham 1897; 99, Id. of Orleans. Vanatta 1914; 223, Magdalen Ids.: Grindstone Id.

198. PUNCTUM MINUTISSIMUM (Lea).

Heron 1880; 40, Ottawa District. Provancher 1890; 116, Ottawa. Hanham 1897; 99, Quebec area. Vanatta 1914; 223, Magdalen Ids.: Grindstone Id.

199. PUPILLA MUSCORUM (Linnaeus). Packard

1863; 424, Mingan Ids.; Fright Id. (Pupa badia). Packard 1867; 290, Mingan Ids., same name. Latchford 1884; 1052, Anticosti (P. muscorum). Provancher 1890; 128, islands in the Gulf of St. Lawrence. Hanham 1893; 66, Quebec area. Dall 1905; 29, Anticosti. Whiteaves 1905; 171, Anticosti, mouth of Jupiter River.

200. PUPOIDES ALBILABRIS (C. B. Adams).

D<sup>U</sup>Urban 1860; 97, Rouge River Valley (Bulimus marginatus). Whiteaves 1863; 106, citing D<sup>U</sup>Urban, same name.

201. RETINELLA BINNEYANA (Morse). Latchford

1887; 107, Buckingham, 1 mile up the Lièvre River. Provancher 1890; 114, Hull, etc. Hanham 1897; 99, Quebec area. Dall 1905; 39, Quebec. Vanatta 1914; 223, Magdalen Ids.: Grindstone Id. Hart 1929; 104, Abitibi region. Baker 1930; 198.

202. RETINELLA ELECTRINA (Gould). Packard

1863; 424, Magdalen Ids.: Entry Id. Whiteaves 1863; 106, near Brome Lake. Packard 1867; 289, Belles Amours, Labrador. Heron 1880; 40, Ottawa District. Latchford and Poirier 1885; 264, Woods, Chats. Provancher 1890; 114, Brome Lake. Hanham 1893; 66, Barachois. Hanham 1897; 99, Quebec City (Zonites radiatulus). Vanatta 1914; 223, Magdalen Ids.: Grosse Isle, Basin Id., Grindstone Id. (Vitreia hammonis). Hart 1929; 104, Abitibi region. Baker 1930; 196, Labrador; Magdalen Ids.; Anticosti; Quebec.

203. RETINELLA INDENTATA (Say). Whiteaves

1863; 106, Montreal Mountain. Heron

1880; 40, Ottawa District. Latchford and Poirier 1885; 264, Woods, Chats. Provancher 1890; 115, locality unspecified.

204. ?STENOTREMA FRATERNUM (Say). Pro-

vancher 1890; 125 (Helix hirsuta Say, with synonyms; Triodopsis hirsuta Woodward, Helix fraterna Wood, Stenotrema hirsuta Tryon). There is no other record of S. hirsutum for Quebec and judging by the synonymy given by Provancher, his specimens were more likely S. fraternum.

205. STENOTREMA LEAII (Binney). Shep-

pard 1830; 194 (Helix --- ?), Quebec. D<sup>U</sup>Urban 1860; 96, Rouge River Valley (H. monodon Rackett). Whiteaves 1863; 105, Lower Canada, same name. Heron 1880; 40, Ottawa District. Provancher 1890; 125, Quebec. Hanham 1897; 101, Id. of Orleans; Gomin swamp (Polygyra monodon var. fraterna).

206. STRIATURA EXIGUA (Stimpson). Heron

1880; 40, Ottawa District. Provancher 1890; 114, Ottawa. Hanham 1897; Isle d'Orléans. Vanatta 1914; 223, Magdalen Ids.: Basin Id., Grindstone Id. Hart 1929; 104, Abitibi region.

207. STRIATURA FERREA (Morse). Latchford

and Poirier 1885; 215, Hull. Hanham 1897; 99, Quebec area.

208. STRIATURA MILIUM (Morse). Heron

1880; 40, Ottawa District. Provancher 1890; 113, Rigaud.

209. STROBILOPS LABYRINTHICA (Say).

Bell 1858; 100, mouth of Magdalen River (Helix labyrinthica). D<sup>U</sup>Urban 1860; 97, Rouge River Valley. Whiteaves 1863; 106, Id. of Orleans, Montmorenci Falls, etc. Latchford and Poirier 1885; 265, Woods, Chats. Provancher 1890; 126, Canada. Hanham 1897; 101, Id. of Orleans (Vallonia l.).

210. ?SUCCINEA AMPHIBIA. Sheppard 1830;

194, St. Louis Road, Quebec City. I cannot identify this species which is almost certainly not S. amphibia.

211. (*SUCCINEA AUREA*). Poirier 1883: 74, Beaver Meadow, Hull. Latchford and Poirier 1885: 58, record repeated and questioned. This is possibly a young *S. ovalis* or a deformed specimen of another species.

212. *SUCCINEA AVARA* (Say). Packard 1863: 424, Mingan; Anticosti. Whiteaves 1863: 105, Id. of Orleans. Packard 1867: 290, Mingan Ids. Heron 1880: 39, Ottawa District. Latchford 1884: 1052, Anticosti. Provancher 1890: 136, locality unspecified. Hanham 1893: 66, Barachois. Hanham 1897: 102, Quebec area. Vanatta 1914: 223, Magdalen Ids.: Grindstone Id.

213. *SUCCINEA OVALIS* (Say). Bell 1858: 97, Hare Id. (*S. obliqua* Say); p. 100, mouth of Magdalen River, same name; p. 101, Magdalen River, same name. D'Urban 1860: 96, Rouge River Valley, same name. Packard 1863: 424, common at Anticosti; Mingan Ids.: Frigate and Niapisca Ids. Whiteaves 1863: 105, Lower Canada. Packard 1867: 290, Mingan Ids. Heron 1880: 38, Ottawa District. Latchford 1884: 1052, Anticosti. Latchford and Poirier 1884: 131, Hull. Latchford and Poirier 1885: 265, Woods, Chats. Latchford 1887: 107, Buckingham. Provancher 1890: 135, Gaspé to Arkansas. Hanham 1893: 66, Barachois. Hanham 1897: 102, Quebec area; St. Charles River; Quebec City. Vanatta 1914: 223, Magdalen Ids.: Basin, Grindstone, Hart 1929: 104, Abitibi region.

214. ?*SUCCINEA TOTTENIANA* Lea. Hanham 1897: 102, St. Charles River, Quebec City. Probably a misidentification.

215. *SUCCINEA VERMETA* (Say). Bell 1858: 100, mouth of Magdalen River. Whiteaves 1863: 105, Restigouche River.

216. *Triodopsis albolabris* (Say). D'Urban 1860: 96, Rouge River Valley. Whiteaves 1863: 105, Lower Canada. Heron 1880: 40, Ottawa District. Latchford and Poirier 1885: 264, Woods, Chats. Provancher 1890: 122, Cap Rouge. Hanham 1897: 99, Quebec area,

well distributed, but not common. Nylander 1914: 141, Temiscouata Lake. Unpublished records: Meach Lake; St. Andrews, Argenteuil Co.

217. *TRIODOPSIS ALBOLABRIS DENTATA* (Tryon). Latchford and Poirier 1887: 350, Lièvre River; Valley of the Rouge River (D'Urban's "e x o - l e t a").

218. *TRIODOPSIS ALBOLABRIS MAJOR* (Binney). Provancher 1890: 122, Cap Rouge, rare.

219. *TRIODOPSIS ALBOLABRIS TRAVERSENSIS* ("Leach" Walker). Hanham 1897: 99, Quebec area (*Polygyra albolabris maritima*). La Rocque 1953: 306 (*maritima*).

220. *TRIODOPSIS DENTIFERA* (Binney). Whiteaves 1862: 458, Montreal. Whiteaves 1863: 105, near Brome Lake. Latchford 1893a: 118, Montreal east to Island of Orleans and southward to Knowlton, Eastern Townships. Provancher 1890: 123, especially in mountains. Hanham 1897: 99, St. Romuald; Ste Foye Road, Island of Orleans. Unpublished record: Alcove.

221. *TRIODOPSIS FRAUDULENTA VULGATA* Pilsbry. Provancher 1890: 126, Canada to Florida and Texas.

222. *TRIODOPSIS TRIDENTATA* (Say). Whiteaves 1863: 105, Montreal Mountain, but very rare. Provancher 1890: 125, locality unspecified.

223. *VALLONIA ALBULA* Sterki. Dall 1905: 23, Eastern Canada to B. C.; Quebec.

224. *VALLONIA COSTATA* (Müller). Latchford 1884: 1052, Anticosti. Hanham 1893: 66, Barachois. Hanham 1897: 101, both sides of the St. Lawrence River.

225. *VALLONIA EXCENTRICA* Sterki. Hanham 1897: 101, St. Joseph's, Quebec district, not observed elsewhere.

226. *VALLONIA PULCHELLA* (Müller). Bell 1858: 100, mouth of Magdalen River (*Helix*



pulchella). D\*Urban 1860: 97, Rouge River Valley. Packard 1863: 424, Anticosti (H. minuta Say). Whiteaves 1863: 106, abundant throughout the province. Latchford 1885: 221, Ottawa District. Provancher 1890: 124, Cap Rouge. Hanham 1897: 101, Quebec District; Id. of Orleans.

227. VERTIGO BOLLESIANA Morse. Latchford and Poirier 1885: 226, Hills near Ironsides. Hanham 1897: 101, St. Joseph's near St. Romuald. Hart 1929: 104, Abitibi region.

228. VERTIGO GOULDII Binney. D\*Urban 1860: 97, Rouge River Valley. Whiteaves 1863: 107, Id. of Orleans; Rivière du Loup; Montreal Mountain. Heron 1880: 40, Ottawa District. Latchford 1884: 1052, Anticosti. Provancher 1890: 130, Quebec. Hanham 1897: 101, Id. of Orleans. Vanatta 1914: 223, Magdalen Ids.: Grindstone Id.

229. VERTIGO MILIUM Gould. Taylor and Latchford 1890: 57, Ottawa District. Hanham 1897: 101, Id. of Orleans.

230. VERTIGO MODESTA HOPPII (Möller). Packard 1867: 289, Strawberry Harbor, Labrador. Latchford 1884: 1052, Anticosti. Dall 1905: 29, doubts Anticosti record, questions Ungava and Labrador records.

231. VERTIGO OVATA Say. Whiteaves 1863: 107, Montreal, questioned. Latchford and Poirier 1885: 226, Hull. Provancher 1890: 131, Canada. Hanham 1897: 101, Quebec area.

232. VERTIGO VENTRICOSA Morse. Latchford 1889: 68, Hull. Hanham 1897: 101, Id. of Orleans. Dall 1905: 31, Whiteaves 1905: 171, Rivière du Loup; Quebec. Vanatta 1914: 223, Magdalen Ids.: Basin Id., off Coffin Id.

233. VITRINA LIMPIDA Gould. Whiteaves 1863: 105, Montreal, Rivière du Loup; Trois Pistoles; Ste Anne; Restigouche River. Heron 1880: 38, "Hull mountains." Latchford 1884: 1052, Anticosti. Provancher 1890: 109, Mont-

real, Rivière du Loup, etc. Hanham 1893: 66, Barachois. Hanham 1897: 98, Quebec area: St. Joseph's, St. Romuald, banks of creeks running into river at St. Charles. Vanatta 1914: 223, Magdalen Ids.: Basin Id. Hart 1929: 104, Abitibi region.

234. VITRINA PELLUCIDA (Draparnaud). Bell 1858: 100, mouth of Magdalen River. Packard 1863: 424, Anticosti; Mingan Ids., common.

235. VITRINA PELLUCIDA ANGELICAE Beck. Packard 1867: 289, Labrador. Packard 1867: 290, Mingan Ids.

236. ZONITOIDES ARBOREUS (Say). D\*Urban 1860: 97, Rouge River Valley. Packard 1863: 424, Mingan Ids.: Niapisca Id.; Magdalen Ids.: Entry Id. Whiteaves 1863: 106, Quebec, unspecified locality. Packard 1867: 290, Mingan Ids. Heron 1880: 40, Ottawa district. Latchford and Poirier 1885: 264, Woods, Chats. Provancher 1890: 114, Hull; Labrador. Hanham 1893: 66, Barachois. Hanham 1897: 99, Quebec area. Vanatta 1914: 223, Magdalen Ids.: Grosse Isle, Basin Id., Grindstone Id. Hart 1929: 104, Abitibi region.

237. ZONITOIDES NITIDUS (Müller). Latchford 1884: 1052, Anticosti. Latchford 1885: 213, Hull. Provancher 1890: 114, Ottawa. Hanham 1897: 99, Quebec area; St. Charles River.

238. ZOÖGENETES HARPA (Say). Bell 1858: 100, Magdalen River (*Helix harpa*). Packard 1863: 417, Labrador. Whiteaves 1863: 106, Montreal Mountain; Rivière du Loup; Métis; mouth of Magdalen River; Marsouin Valley (*Bulimus harpa*). Packard 1867: 289, Labrador. Latchford 1884: 1052, not observed on Anticosti but found in Gaspé and to Montreal. Latchford 1893c: 132, Ste Petronille, on Id. of Orleans; introduced at Ottawa. Hanham 1893: 66, Barachois. Hanham 1897: 99, Id. of Orleans and Quebec area. Dall 1905: 21, Gaspé. Hart 1929: 104, Abitibi region.

NOTE. The introduction mentioned above (Latchford, 1893c: 132) was made on the Ottawa side of the Ottawa region; it did not succeed.

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