

MOLLUSCA

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LAND MOLLUSCA***Gastropoda*****1. Family ACAVIDAE**

Genus HEDLEYELLA

2. Family HELICIDAE

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3. Family RHYTIDIDAE

Genus RHYTIDA

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INTRODUCED LAND MOLLUSCA**7. Family LIMACIDAE**

Genus MILAX

Family **ACAVIDAE**Genus **HEDLEYELLA** Iredale, 1914.*Hedleyella atomata* (Gray), var. *kershawi* (Brazier).1871. *Bulimus* (*Liparus*) *kershawi* Brazier, P.Z.S. Lond., p. 641.1930. *Hedleyella atomata* (Gray), var. *kershawi* Brazier. Gabriel P.R.S.

Vic., XLIII, Pt. 1, (N.S.), p. 66, pl. 3, figs. 1-8.

Size of Type—Length, 50·79; breadth, 28·56; alt. 25·39mm.*Aperture*—Length 31·73; breadth, 15·8mm.*Type Locality*—Snowy River, Gippsland, Victoria.*Observations*.—This is a beautiful shell, easily the largest of our Victorian terrestrial forms, and apparently confined to the eastern portion. Consistency in shape is not apparent, as will be seen in the figures above quoted, and further examination of numerous specimens convinces us that this Victorian form should be regarded as of varietal value only. Specimens from the Snowy River area, as defined in this report, are on the whole smaller than the type.*Localities*.—4 specimens (F 1671) Wombargo Creek (above 3,000 ft.); 4 specimens (F 1910) Suggan Buggan River; 8 specimens (F 1909) Honeysuckle Track, Gelantipy; 3 specimens (F 1911) Snowy River (Moon's Crossing).Family **HELICIDAE**Genus **CHLORITIS** Beck, 1837.*Chloritis victorica* (Cox).1868. *Helix victorica* Cox, Mon. Aust. Land Shells, p. 37, pl. 12, fig. 5.1930. *Chloritis victorica* (Cox). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 67.*Size of Type*.—Maj. diam., 15·99; min., 12·69; alt., 11·42mm.*Type Locality*.—Westerport, Victoria.*Observations*.—This is a very frequent and widely distributed species throughout the State, with an extension of range to King Island and Mt. Kosciusko. It is normally of a uniform brown colour and when deprived of its characteristic bristly epidermis, it alters in general appearance, and is suggestive of another species.*Localities*.—17 specimens (F 1899); Honeysuckle Track, Gelantipy; 14 specimens (F 1670) Wombargo Creek.Family **RHYTIDIDAE**Genus **RHYTIDA** Albers, 1860.*Rhytida ruga* (Cox).1871. *Helix ruga* Cox, in Legrand, Coll. Mon. Tas. Land Shells, sp. 24, pl. 1, fig. 5.1930. *Rhytida ruga* (Cox). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 69.

Size of Type.—Maj. diam., 9; min., 8; alt., 3mm.

Type Locality.—Mount Wellington, Tasmania.

Observations.—One of our commoner forms enjoying a wide distribution throughout Victoria. It somewhat approaches *R. lampra* Reeve but is immediately distinguished by its finer sculpture.

Localities.—1 specimen (F 1688) Honeysuckle Track, Gelantipy; 1 specimen (F 1689) Rockbank, Wulgulmerang; 1 specimen (F 1690) Wombargo Creek (above 3,000 ft.).

Family ENDODONTIDAE

Genus CHAROPA Albers, 1860.

Charopa funerea (Cox).

1868. *Helix funerea* Cox, Mon. Aust. Land Shells, p. 16, pl. 3, fig. 1.

1930. *Charopa funerea* (Cox). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 73.

Size of Type.—Maj. diam., 6.34; min., 5.33; alt., 2.53mm.

Type Locality.—Mudgee, New South Wales.

Observations.—A brown, closely-ribbed species, widely distributed throughout the State. It is also recorded from New South Wales and southern Queensland.

Localities.—7 specimens (F 1672) Snowy River (Moon's Crossing); 4 specimens (F 1674) Murrindal Valley, W Tree.

Charopa tamarensis (Petterd).

1879. *Helix tamarensis* Petterd, Mon. Tas. Land Shells (April), p. 30.

1930. *Charopa tamarensis* Petterd. Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 72.

Size of Type.—Maj. diam., 6; min., 5; alt., 2mm.

Type Locality.—Rifle butts, near Launceston, Tasmania.

Observations.—A characteristic little species, possessing a wide umbilicus and rays of rusty-brown colour. Two specimens from the same locality vary a little in that they show radials much wider apart, but as they are alike in every other respect we regard them as variants. It has a wide distribution in Victoria and at Mt. Kosciusko Hedley records it from Wilson's Valley.

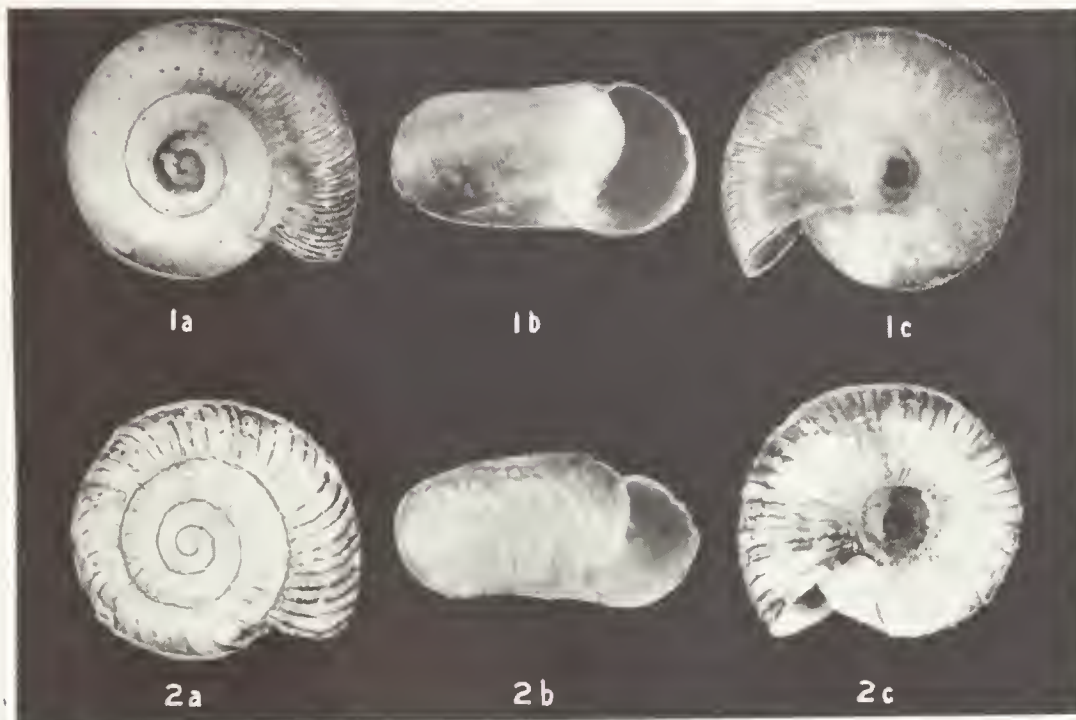
Locality.—4 specimens (F 1859) Tableland, West of Wombargo (4,500 ft.) (K. C. Rogers).

Charopa brazenori sp. nov. (Pl. 13, upper; Fig. 1.)

Shell small, discoid, whitish, translucent, thin, fragile, umbilicated. Whorls including protoconch about $4\frac{1}{2}$, sculptured with numerous, equidistant, radial riblets to the number of about



The Brush-tailed Rock Wallaby, *Petrogale penicillata* Griffith, Smith and Pidgeon.



1. *Charopa brazenari* n. sp. Type Reg. No. F 17682. A Honeysuckle Track, Gelantipy.
 2. *Charopa snowgensis* n. sp. Type Reg. No. F1673. A Snowy River (Moon's Crossing).
- a—Upper surface; b—Side view; c—Lower surface.



Rounded boulders of granite embedded in "Porphyry"—Campbell's Nob.

130 on the last whorl. Interstices possessing fine growth-lines, reticulated by microscopic close spiral striæ. Sutures well impressed. Aperture slightly oblique, rotundly lunar. Peristome thin, sharp. Umbilicus open, about one fourth of shell's greatest diameter, exposing all the whorls, and on which may be clearly seen the radial and microscopic spiral sculpture. Inner lip with a white callus, concealing many riblets. Animal white with a dark line running from the tentacles to the mantle edge.

Size of Type.—Maj. diam., 3.3; min., 2.8; alt., 1.8mm.

Type Locality.—Honeysuckle Track, Gelantipy.

Observations.—A small shell, with a near ally in *C. ricei* Brazier. The flatness and coarser sculpture of the novelty immediately separates the two forms.

This species is dedicated to Mr. C. W. Brazenor to whom we are indebted for help in field collecting and photographs.

Type Reg. No. F 1682 A and 5 Paratypes (F 1682) in collection of National Museum of Victoria; 1 Paratype in collection of C. J. Gabriel.

Charopa snowyensis sp. nov. (Pl. 13, upper; Fig. 2).

Shell small, white, covered with light brown epidermis, sub-discoidal, umbilicated; spire nearly flat, slightly raised above the last whorl. Whorls $4\frac{1}{2}$ sculptured with fine radial ribs, numbering about 50 on the ultimate whorl which is slightly descending. Interstices striated with minute growth-lines, averaging about fifteen and crossed by spiral striæ, the latter distinctly visible above and below. Sutures impressed. Aperture a little oblique, roundly lunate. Peristome simple, thin. Several ribs in front of aperture covered by a white callus glaze. Umbilicus wide, about one fourth of shell's greatest diameter and showing all the volutions.

Size of Type.—Maj. diam., 3.2; min., 2.8; alt., 1.6mm.

Type Locality.—Snowy River (Moon's Crossing) Victoria.

Observations.—An interesting shell which may be compared with the new species *C. jemmysensis* (these *Memoirs ante p.*). However, the consistently higher spire and narrower umbilicus together with the distinct epidermis of the species are more than sufficient grounds for separation.

Type Reg. No. F 1673 A and 5 Paratypes F 1673 B and C in collection of National Museum of Victoria; 2 Paratypes in collections of C. J. Gabriel.

Localities.—22 specimens (F 1673). Snowy River (Moon's Crossing); 2 specimens (F 1687) Suggan Buggan River.

Charopa sp. ?

Size of Type.—Maj. diam. 1.3; min., 1.1; alt. 0.6mm.

Locality.—1 specimen (F 1680) Wombargo Creek (4,000 ft.)

Observations.—One, minute, imperfect specimen.

Charopa sp. ?

Size of Type.—Maj. diam. 3.1; min. 2.7; alt., 1.5.

Locality.—1 specimen (F 1677) Snowy River (Moon's Crossing) in moss.

Observations.—One, small, brown imperfect example.

Charopa sp. ?

Size of Type.—Maj. diam., 2.3; min., 2.3; alt., 1.3.

Locality.—2 specimens (F 1675) Snowy River (Moon's Crossing).

Observations.—Two examples, dark brown (juvenile).

Genus EGILODONTA Iredale, 1937.

Egilodonta bairnsdalensis (Gabriel).

1930. *Charopa bairnsdalensis* Gabriel, P.R.S. Vic., XLIII, (N.S.), pt. 1, p. 78, pl. 2, figs. 11, 12.

1937. *Egilodonta bairnsdalensis* (Gabriel), Iredale, Aust. Zool., III, p. 328.

Size of Type.—Maj. diam., 2.0; min., 1.8; alt., 0.9mm.

Type Locality.—Bairnsdale, Victoria.

Observations.—A small, beautifully sculptured species, light horn colour, and possessing an umbilicus almost half the shell's diameter. Type in the National Museum, Victoria.

Locality.—1 specimen (F 1678) Wombargo Creek (4,000 ft.).

Genus OREOMAVA Iredale, 1933.

Oreomava cannfluviatilis (Gabriel).

1929. *Allodiscus cannfluviatilis* Gabriel, Vic. Nat., XLVI, (6) p. 133, figs 1, 2, and text fig.

1930. *Id.*, P.R.S., Vic., XLIII, Pt. 1, (N.S.), p. 83.

1937. *Oreomava cannfluviatilis* (Gabriel). Iredale, Aust. Zool., VIII, p. 330.

Size of Type.—Maj. diam., 2.8; min., 2.4; alt., 1.7mm.

Type Locality.—Cann River, Victoria.

Observations.—A small shell, readily identified, the spiral liræ bordering the umbilicus providing a useful recognition mark. Type (Nat. Mus. Vic.), collected by J. Clark.

Localities.—3 specimens (F 1681) Wombargo Creek (4,000 ft.). 2 specimens (F 1905) Tableland West of Wombargo (4,500 ft.) (K. C. Rogers).

Genus *ALLODISCUS* Pilsbry, 1892.*Allodiscus niveus* (Hedley).

1896. *Endodonta nivea* Hedley, Rec. Aust. Mus., II, p. 102, pl. 23, figs. 5-7.

Size of Type.—Maj. diam., 3.25; min., 2.75; alt., 1.5mm.

Type Locality.—Wilson's Valley, at an altitude of 4,500 ft.; Mt. Kosciusko, New South Wales.

Observations.—A small, white, thin, shining shell possessing a narrow perforation and sunken spire or as the author describes it a shallow crater, one third of the shell's major diameter. It is a distinctive form and with the excellent figures provided no difficulty should be experienced in its identification. The author remarks "This species nearly approaches *E. antialba* Beddome from Tasmania, from which its narrow umbilicus and shallow spire readily distinguishes it." Under decaying timber splendid examples were obtained, one of which exceeds the dimensions of type measuring 4.3mm. This is an interesting addition to the Victorian land shell fauna.

Locality.—8 specimens (F 1679) Wombargo Creek (4,000 ft.).

Allodiscus meracus (Cox and Hedley).

1912. *Flammulina meraca* Cox and Hedley, Mem. Nat. Mus. Melb., No. 4, p. 13, pl. 3, figs. 19-21.

1930. *Allodiscus meracus* (Cox and Hedley). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 83.

Size of Type.—Maj. diam., 4; min., 3; alt., 2mm.

Type Locality.—Dandenong Ranges, Victoria.

Observations.—A small, pure white species frequently located in association with *H. subdepressa* Brazier, on many of our mountainous districts under charred and decaying timber. The animal is of a very dark colour rendering it more difficult to detect than its associate. In 1930, one of us (C.J.G.) referred to two specimens collected at Paradise Falls, near Whitfield showing a slight increase in size of the umbilicus. These are similar to the Wombargo shells and we regard them as variants of Cox and Hedley's *meracus*.

Locality.—8 specimens (F 1679) Tableland West of Wombargo (4,500 ft.), (K. C. Rogers).

Genus *PARALAOMA* Iredale, 1913.*Paralaoma morti* (Cox)

1864. *Helix morti* Cox, Ann. Mag. Nat. Hist., (3), XIV, p. 182.

1930. *Laoma morti* (Cox). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 78.

1937. *Paralaoma morti* (Cox). Iredale, Aust. Zool., VIII, Pt. 4, p. 313.

Size of Type.—Maj. diam., 2.03; min., 1.77; alt., 1.01mm.

Type Locality.—Green-oakes, Darling Point, Sydney, N.S.W.

Observations.—A small, brown species, exceedingly common throughout Victoria.

Locality.—4 specimens (F 1676) Snowy River (Moon's Crossing) in moss.

Family ZONITIDAE

Genus HELICARION Ferussac, 1821.

Helicarion euvieri Ferussac.

1821. *Helicarion euvieri* Ferussac, Tabl. Syst., p. 20.

1849. *Vitrina verreauxi*, Pfeiffer P.Z.S., 1849, p. 132.

1862. *Vitrina verreauxi* Pfeiffer. Reeve, Conch. Icon., XIII, pl. 4, fig. 21.

1930. *Helicarion euvieri* Ferussac. Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 85.

1937. *Id.*, Iredale, Aust. Zool., ix, Pt. 1, p. 7.

Size of average specimen.—Diam., 11; alt., 6.5mm.

Type Locality.—Terres Australes.

Observations.—A smooth, shining species of common occurrence throughout Victoria, and appears to prefer damp conditions under decayed timber. Reeve (*loc. cit.*) remarks "Distinguished chiefly by its narrowly produced transverse form." Its golden-yellow colour is fairly constant but specimens from Lilly Pilly Gully, Wilson's Promontory are much darker—approaching chocolate-brown.

Locality.—1 specimen (F 1893) Wombargo Creek (4,000ft.) collected on damp Southern Wollybutt hillside.

Helicarion sp. ? (aff. *H. euvieri* Ferussac).

Size of Type.—Maj. diam., 14.0; Min., 11.0; alt., 6.0mm.

Locality.—1 specimen (F 1897) Honeysuckle Track, Gelantipy.

Observations.—One specimen taken alive showing points of difference with *H. euvieri*, particularly as regards the animal. We are awaiting further examples to assist in our diagnosis.

Genus CYSTOPELTA Tate, 1881.

Cystopelta petterdi Tate, var. *purpurea* Davies.

1912. *Cystopelta petterdi* Tate, var. *purpurea* Davies. P.R.S. Vic. (N.S.), XXIV (2) p. 331.

1930. *Cystopelta petterdi* Tate, var. *purpurea* Davies, Gabriel, P.R.S. Vic. XLIII Pt. 1 (N.S.), p. 86.

Size of Type.—Length of foot 19.5mm; length of shield 16.7mm.; depth of shield 3.75mm.

Type Locality.—Narbethong, Victoria.

Observations.—A small slug-like animal with its organs drawn into a dorsal hump as in the snails but without a shell. Living specimens pale grey, with two short darker lines on either side of the posterior end of the foot, and on the dorsal surface of the shield a few bright violet spots.

Locality.—3 specimens (F 1891) Wombargo Creek (4,000 ft.).

These slugs were collected on the wet southern slopes of the hillside to the North of Wombargo Creek. It carries open Wollybutt jungle.

INTRODUCED LAND MOLLUSCA

Family LIMACIDAE

Genus *MILAX* Gray, 1855.

Milax gagates (Draparnaud).

1801. *Limax gagates* Draparnaud, Tabl. Moll. France, p. 100.

1930. *Milax gagates* (Draparnaud) Gabriel P.R.S. Vic. XLIII, Pt. 1 (N.S.) p. 87.

A very variable slug; black, slate grey, dark red, brown or yellowish, with dusky markings, pale underneath, acutely keeled from mantle to tail. Shell internal, a small calcareous plate.

Locality.—2 specimens (F 1895) Snowy River (Deddick Crossing).

Milax sowerbii Ferrussac.

1774. *Limax marginatus* Mueller, Verm. Hist. 11 p. 10.

1823. *Limax sowerbii* nobis Ferrussac, Hist. Nat. Moll., 11 p. 955, pl. VIII, f. 5 and 6.

Type Locality.—London, England.

A slim creamy yellow slug; white beneath; the mantle with a deep brown horse-shoe shaped line; also a pair of dark lines running from the mantle to tail. Shell a small calcareous plate.

Locality.—20 specimens (F 1896) Snowy River (Campbell's Nob). These slugs are very common in the whole of the Gelantipy area.

FRESH WATER MOLLUSCA

Gastropoda

Family 1 LIMNAEIDAE

(a) Genus LIMNAEA.

(b) Genus ISIDORELLA.

Lamellibranchiata

Family 1 CYCLADIDAE

Genus PISIDIUM

Gastropoda

Family LIMNÆIDAE

Genus LIMNÆA Lamarck, 1799.

Limnaea brazieri Smith.

1882. *Limnaea brazieri* Smith, Journ. Linn. Soc. Lond., Zool., XVI, p. 274, pl. 5, fig. 15.

Size of Type.—Length 9; diam., $5\frac{1}{2}$; Aperture long 6; breadth $4\frac{1}{2}$ mm.

Type Locality.—Glebe Point, Sydney, New South Wales.

Observations.—This shell, which is an interesting addition to the Victorian fluviatile molluscs, the author describes as ovate glossy, brownish horn-colour, somewhat strongly striated longitudinally by the lines of increment, without spiral or transverse sculpture. Our identification has been facilitated by specimens from the type locality sent to the National Museum from the Australian Museum, Sydney.

Locality.—50 specimens (F 1903) dam, Banool, Gelantipy, Victoria (A. Hodge).

Limnaea gunni Petterd.

1889. *Limnaea gunni* Petterd, P.R.S. Tas., p. 66, pl. 2, fig. 10; pl. 3, figs. 9. and 12 (animal).
1939. *Limnaea gunni* Petterd. Gabriel. Mem. Nat. Mus. Viet., XI, p. 108, pl. 1, fig. 8.

Size of Type.—Length, 7; breadth, 5.5mm.

Type Locality.—South Esk River, near Launceston, Tasmania.

Observations.—A very thin, fragile, yellowish horn-coloured shell, previously located at Tarraville.

Locality.—22 specimens (F 1904) swamp, Rockbank. These specimens were found in a natural soak on top of the soft mud between grass tussocks. 1 specimen (F 1940) Sandy Swamp, Rockbank.

Limnaea sp.

The specimens, apparently distinct from any known Victorian form, are either too immature or too fragmentary for certain diagnosis.

Locality.—13 specimens (F 1894) Little River, Rockbank.

The Little River is a clear stream with a loose boulder bottom on which the snails were crawling in about a foot to eighteen inches of water.

Genus *ISIDORELLA* Tate, 1896.*Isidorella newcombi* (Adams and Angas).

1864. *Physa newcombi*, A. Adams and Angas, P.Z.S. Lond., 1863, p. 416.
 1939. *Isidorella newcombi* Adams and Angas. Gabriel, Mem. Nat. Mus. Vic., XI., p. 117, pl. 2, fig. 22.

Size of Type.—Length, 21; breadth, 14.6mm.

Type Locality.—Ponds of Mt. Margaret, Central Australia.

Observations.—A thin, ovate-globose brownish shell with finely spirally-striated, whorls.

Locality.—6 specimens (F 1900) Banool, Gelantipy. (A. Hodge).

Isidorella newcombi Adams and Angas var. *crebreciliata* (Tenison Woods).L

1878. *Physa crebreciliata*, Tenison Woods, Trans. Roy. Soc. Vic., XIV, p. 63.
 1939. *Isidorella newcombi* (Ad. and Ang.) var. *crebreciliata* (Tenison Woods), Gabriel, Mem. Nat. Mus. Vic., XI, p. 119, pl. 2, fig. 25.

Size of Type.—Length, 15; breadth, 7mm.

Type Locality.—Caulfield, Victoria.

Observations.—On this form Hedley remarks, "There are on the body-whorl about thirty-two spirals of fine ciliæ decussated by fine, close longitudinal lamellæ. The latter as in the case of *I. newcombi*, rise round the suture into a sort of ruff, or collar."

Locality.—40 specimens (F 1901) dam Rockbank; 18 specimens (F 1902) Little River; 1 specimen (F 1942) Banool, Gelantipy.

Lamellibranchiata

Family CYCLADIDAE

Genus *PISIDIUM* Pfeiffer, 1875.*Pisidium etheridgii* E. A. Smith.

1882. *Pisidium etheridgii* Smith, Journ. Linn. Soc. Conch., Zool., XVI, p. 306, pl. 7, fig. 35.
 1939. *Pisidium etheridgii* Smith. Gabriel, Mem. Nat. Mus. Vic., XI., p. 129, pl. 4, fig. 37.

Size of Type.—Length, 5.5; breadth, 6.5; diam., 3.5mm.

Type Locality.—Yan Yean Reservoir, Plenty District, Victoria.

Observations.—The smallest Victorian freshwater bivalve. Smith (*loc. cit.*) remarks: "Umbones rather prominent, with the young shell forming a more or less distinct apical cap. Concentric striae very fine. Not unlike the European *P. casertanum*, but rather less inequilateral."

Locality.—5 specimens (F 1892) dam Rockbank (2,800 ft.); 17 specimens (F 1898) Sandy Swamp (4,500 ft.) Rockbank.