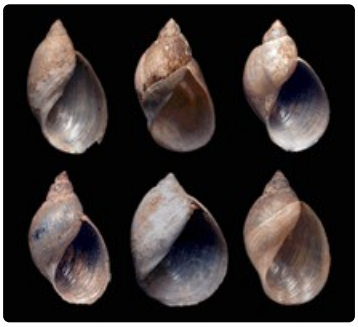
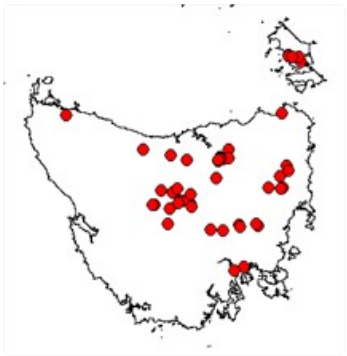
Austropeplea (*Austropeplea*) *huonensis* (Tenison Woods, 1876)



Austropeplea (Austropeplea) huonensis (adult size 10-15 mm)



Distribution of *Austropeplea (Austropeplea) huonensis*.

Disclaimer

This genus is in need of revision, and the species concepts we have used have not been rigorously tested. There are few morphological characters that allow separation between species and they are difficult to separate based on shell characters alone. This situation needs to be resolved by additional molecular and morphological studies, involving comprehensive sampling.

Diagnostic features

Some individuals of this species have a large aperture and reflected mantle like that of *A. papyracea*. It tends to be paler in colour than *A. brazieri*.

Classification

Austropeplea (***Austropeplea***) ***huonensis*** (Tenison Woods, 1876)

Common name: Tasmanian fluke pond snail.

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Lymnoidea

Family Lymnaeidae

Genus Austropeplea Cotton, 1942

Subgenus Austropeplea Cotton, 1942

Original name: *Limnaea huonensis* Tenison Woods,1876. *In* Tenison Woods, J.E. (1876). On the Freshwater Shells of Tasmania. *Papers and Proceedings of the Royal Society of Tasmania* 1875: 66-82.

Type locality: River Huon, Tasmania.

Synonyms: *Limnaea launcestonensis* Tenison Woods, 1876; *Limnaea gunnii* Petterd, 1889; *Limnaea subaquatilis neglecta* Petterd, 1889; *Limnaea lutosa* Petterd, 1889.

State of taxonomy

Until recently, a large number of available names for these Australian lymnaeids (e.g., Iredale 1943, 1944) were lumped as *Austropeplea tomentosa* (e.g., Boray & McMichael, 1961), a name based on a New Zealand species. Recent studies have shown that *A. tomentosa* is very different from the Australian taxa (Puslednik et al. 2009). However, unlike Puslednik *et al.* (2009), we tentatively recognise three species in SE Australia, based on differences in anatomy and molecules.

This genus is in need of revision and the species concepts we have used have not been rigorously tested. There are no clear-cut shell characters that allow separation. The current situation is clearly far from satisfactory and can only be resolved by additional molecular and morphological studies involving dense sampling.

Biology and ecology

This common species is found amongst water vegetation in dams, ponds, billabongs, rivers, streams, water-logged pasture, springs, swamps, and similar habitats. It is semi-amphibious - commonly found out of the water along the banks on damp mud. It feeds on algae and detritus. Its egg mass is a crescent-shaped jelly strip containing many small eggs. Development is direct.

Distribution

Tasmania.

Notes

This species is a vector of sheep liver fluke parasite.

Further reading

Beesley, P. L., Ross, G. J. B. & Wells, A., Eds. (1998). *Mollusca: The Southern Synthesis. Parts A & B*. Melbourne, CSIRO Publishing.

Boray, J. C. (1964). Studies on the ecology of *Lymnaea tomentosa*, the intermediate host of *Fasciola hepatica*. 1. History, geographical distribution, and environment. *Australian Journal of Zoology* 12: 217-230.

Boray, J. C. (1966). Studies on the relative susceptability of some lymnaeids to infection with *Fasciola hepatica* and *F. gigantica* and on the adaptation of *Fasciola* spp. *Annals of Tropical Medicine and Parasitology* 60: 114-123.

Boray, J. C. (1968). *Host-parasite relationship between lymnaeid snails and Fasciola hepatica*. Proceedings of the 3rd International

Conference of the World Association for the Advancement of Veterinary Parasitology, Lyon, France. Veterinary Medical Review, Leverkusen.

Boray, J. C. (1969). Experimental fascioliasis in Australia. *Advances in Parasitology* 7: 95-210.

Boray, J. C. & McMichael, D. F. (1961). The identity of the Australian lymnaeid snail host of *Fasciola hepatica* L. and its response to environment. *Australian Journal of Marine and Freshwater Research* 12: 150-163.

Hubendick, B. (1951). Recent *Lymnaeidae*: their variation, morphology, taxonomy, nomenclature and distribution. *Kongliga Svenska* Kershaw, R. C. (1975). Tasmanian aquatic non-marine Mollusca. Part 1. Lymnaea. *Tasmanian Naturalist* 40: 1-4.

Inaba, A. (1969). Cytotaxonomic studies of lymnaeid snails. *Malacologia* 7: 143-168.

Iredale, T. (1943). A basic list of the fresh water Mollusca of Australia. *Australian Zoologist* 10: 188-230.

Puslednik, L. (2006). Systematics of the Australasian Lymnaeidae. Unpublished Doctoral Thesis for the School of Biological Sciences, University of Wollongong.

Puslednik, L., Ponder, W. F., Dowton, M. & Davis, A. R. (2009). Examining the phylogeny of the Australasian Lymnaeidae (Heterobranchia: Pulmonata: Gastropoda) using mitochondrial, nuclear and morphological markers. *Molecular Phylogenetics and Evolution* 52: 643-659.

Smith, B. J. & Kershaw, R. C. (1981). *Tasmanian Land and Freshwater Molluscs*. Hobart, University of Tasmania.

To cite this resource: **Ponder, W. F., Hallan, A., Shea, M. E., Clark, S. A., Richards, K., Klunzinger, M. W., and Kessner, V. 2023. Australian Freshwater Molluscs. Revision 2.**

https://keys.lucidcentral.org/keys/v3/freshwater_molluscs/

To contact the authors for comment or suggestions, please email: fwmollusc@gmail.com