



***Benthodorbis* Ponder and Avern 2000**

Diagnostic features

Shell small to rather large for the family (up to 4.4 mm) with slightly hyperstrophically coiled shell; near planispiral, protoconch with axial and spiral threads, slightly heterostrophic. Teleoconch with few, rapidly increasing whorls sculptured with close collabral distinctly prosocline growth lines crossed by fine spiral striae; one species with granulose sculpture at intersections of axial and spiral lines. One species (*B. fultoni*) with weak spiral ridge ventrally, otherwise convex. Aperture weakly pyriform. Colour brown, imparted by the rather thick brown periostracum. Operculum paucispiral, lacking pustules on exterior, nucleus eccentric, whorls with slightly frilled edges.

Radula as for family except mesocone with cusps right to tip and base expanding gradually, not expanded at right angles. Mantle cavity acts as a brood chamber. Mantle cavity of *B. pawpela* contained 5 embryos in the large female dissected by Smith (1979), the most anterior by far the largest, the shell being 1.3 mm in maximum diameter and of three quarters of a whorl.

Classification

Benthodorbis Ponder & Avern, 2000

Class Gastropoda

Infraclass Heterobranchia

Infrasubcohort Panpulmonata

Superorder Pyropulmonata

Order Amphibolida

Suborder Glacidorbina

Superfamily Glacidorboidea

Family Glacidorbidae

Genus *Benthodorbis* Ponder and Avern 2000

Type species: *Glacidorbis pawpela* Smith, 1979

Original reference: Ponder, W. F. & Avern, G. J. (2000). The Glacidorbidae (Mollusca: Gastropoda: (Heterobranchia) of Australia. *Records of the Australian Museum* 52: 307–353.

Type locality: Elizabeth Bay, Great Lake, Tasmania.

State of taxonomy

We follow Ponder and Avern (2000) in this resource.

Biology and ecology

In the benthos in soft sediment. Presumably carnivorous. Oviparous and display brooding of the young within the mantle cavity.

Distribution

Known only from Great Lake and Lake Sorrell, Tasmania.

Notes

Differs from *Glacidorbis* in having fine spiral and axial sculpture on the protoconch which lacks distinct punctures or pustules and has a smaller initial part of the first whorl. The teleoconch has fine spiral striae and the axial growth lines are markedly prosocline (orthocline in other glacidorbids). Unlike species of *Glacidorbis*, the base of the shell lacks a distinct concave umbilical area, being only slightly concave. The radula differs from all other known glacidorbids in having the base expanded gradually, not at right angles to the mesocone, so each tooth is nearly triangular in shape.

Further reading

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

Ponder, W. F. (1986b). *Glacidorbidae* (Glacidorbacea: Basommatophora), a new family and superfamily of operculate freshwater gastropods. *Zoological Journal of the Linnean Society* 87: 53-83.

Ponder, W. (2019). Glacidorbidae Ponder, 1986. Pp. 143-144 in C. Lydeard & Cummings, K. S. *Freshwater Mollusks of the World: a Distribution Atlas*. Baltimore, John Hopkins University Press.

Ponder, W. F. & Avern, G. J. (2000). The Glacidorbidae (Mollusca: Gastropoda: Heterobranchia) of Australia. *Records of the Australian Museum* 52: 307-353.

Smith, B. J. (1979). A new species of *Glacidorbis* (? Hydrobiidae, Gastropoda) from Great Lake, Tasmania. *Journal of the Malacological Society of Australia* 4: 121-127.

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