



***Glacidorbis* Iredale, 1943**

Diagnostic features

Shell small to minute, dextral, orthostrophic, near planispiral with wide, shallow umbilicus. Protoconch terminated by abrupt change in sculpture, lacking varix; sculptured with pustules or pits over whole surface, or on initial portion only with remaining part smooth. Teleoconch whorls evenly convex or ridged or keeled near mid-dorsally and near mid-ventrally, sculptured with orthocline axial growth lines or ridges, sometimes also with spiral sculpture. Operculum circular to oval, multispiral to paucispiral, with central, subcentral to eccentric nucleus, and surface covered with minute pustules.

Headfoot with long cephalic tentacles, the snout is short and very broad and fused to the dorsal part of the anterior foot, the eyes are in the middle of the tentacle bases. Foot posteriorly bifid, anteriorly with lateral processes. Jaw with dorsal and ventral elements. Radula with large central teeth bearing several sharp cusps on a pointed mesocone, with broader, arched base lacking additional cusps. Lateral teeth vestigial or narrow and small; marginal teeth absent. Mantle cavity widely open, not modified as a lung, with ciliated ridge on right side. The kidney is in the mantle roof, and there is no gill.

Protandrous, and several large embryos brooded in mantle cavity. Penis narrow and small, completely invaginated, with large sucker or knob-like glands in the large praeputium.

Classification

Glacidorbis Iredale, 1943

Class Gastropoda

*Infra*class Heterobranchia

Infrasubcohort Panpulmonata

Superorder Pyropulmonata

Order Amphibolida

Suborder Glacidorbina

Superfamily Glacidorboidea

Family Glacidorbidae

Genus *Glacidorbis* Iredale, 1943

Type species: *Glacidorbis hedleyi* Iredale, 1943

Original reference: Iredale, T. (1943). A basic list of the freshwater Mollusca of Australia. *Australian Zoologist* 10(2): 188–230.

Type locality: Blue Lake, Mount Kosciusko, NSW, 36°24'S, 148°19'E, dredged from 35 ft (10.7 m).

State of taxonomy

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

Biology and ecology

Glacidorbis species are carnivorous feeding on living and dead invertebrates. *Glacidorbis* species inhabit swamps, bogs, streams and rivers where they are normally found on macrophytes, moss, roots, pieces of wood, or under stones (rarely). *Glacidorbis occidentalis* and *G. hedleyi* can occur in ephemeral habitats whereas most other species live in permanent to semi-permanent streams or swamps. *Glacidorbis hedleyi* and *Glacidorbis occidentalis* are oviparous and display brooding of the young within the mantle cavity. *Glacidorbis occidentalis* young develop into mature females. Small snails appear during late winter to early spring, reaching adult size by summer. *Glacidorbis hedleyi* is the only species known so far to have the unusual reproductive mode where protandric males must copulate before turning into females.

Distribution

South-eastern and south-western Australia from northern New South Wales to Tasmania, Victoria and southeast South Australia, with a disjunct population in the southwest corner of Western Australia.

Further reading

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

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