# Lord Howe Island Placostylus (Placostylus bivaricosus)

### Description

A large ground-dwelling land snail with a pointed shell up to 8cm in length, medium to dark brown in colour (weathering to white in older animals) and with a thickened lip in mature animals. The body is black.

### Conservation Significance

Endemic, listed as an Endangered species under the NSW TSC Act 1995 and as Critically Endangered under the Commonwealth EPBC Act 1999.

Three subspecies are recognized: *P. biwaricosus* cuniculinsulae, *P. biwaricosus* etheridgei, and *P. biwaricosus* biwaricosus, but these are not listed separately under legislation.

### Distribution

The three subspecies have different distributions:

- P. bivaricosus cuniculinsulae, from Blackburn Island; presumed to be extinct.
- P. bivaricosus etheridgei, possibly extinct, but may survive on Little and Big Slopes.
- *P. bivaricosus bivaricosus*, extant but has declined in range and abundance.

The genus has a disjunctive distribution from the Solomon Islands, Fiji and New Caledonia to Lord Howe Island and the northern extremity of New Zealand.

## **Ecology**

Lives in leaf litter, under canopy cover, usually in damp shady locations.

## Population data/health

Point locality data from surveys in 1999 (Ponder & Chapman) revealed 19 sites where live *P. biwaricosus* were found, 9 sites where fresh *P. biwaricosus* specimens were found (extant populations probably exist but none were encountered) and 26 localities where only old *P. biwaricosus* shells were found.

#### Habitat

Damp shaded locations provided by closed canopy. *Drypetes/Cryptocarya* lowland forest on calcarenite soil is their main habitat.

#### **Threats**

Most probable causes of decline of this species are:

- The recent arrival of predatory animals (e.g. rodents, Blackbirds and Songthrushes).
- Loss of habitat through clearing of lowland forest.

## Impact on other species

Unknown.

### References

NSW NPWS 2001. Lord Howe Placostylus Recovery Plan. NSW NPWS, Hurstville, NSW.

NSW NPWS 2002. Predictive Habitat Modeling of the Lord Howe Placostylus on Lord Howe Island. NSW NPWS, Coffs Harbour.



LHI land snail (Placostylus bivaricosus)

Photo: Michael Murphy