

Land Snail Identification & Management Summary

Powelliphanta Land Snail (and Habitat) Identification

The Powelliphanta Land Snail is a protected species which is present in this forest. Ernslaw One Ltd is currently undertaking to reduce impacts of our operations and ultimately protect and enhance our populations of this species.



This snail is the Northern Tararua subspecies *Powelliphanta traversi tararuaensis* and is classed as being “Nationally Endangered” (Hitchmough 2002) and it is thought to have a highly restricted distribution.

It is a medium-sized snail (maximum diameter 53mm; height 25mm) with purple flesh and an olive-green coloured shell, tinged with brown on the top.

These snails are currently patchily distributed throughout Shannon Forest in the indigenous remnants and, to a lesser extent, in the plantation forest itself. They inhabit moist habitat within the forest.

Threats to the snail are; drainage of wet area habitat and riparian areas, damage to indigenous remnants and desiccation of areas. Of direct impact on snails is introduced species of birds, rodents, possums, and pigs

Powelliphanta Land Snail Management

If workers or staff locates Land Snails:

- Stop any Machinery or chemical operations within the area.
- Notify Ernslaw staff

Subsequent Management by Ernslaw

- Notify DOC.
- Exclude stock from the snail areas by erecting fences, and keep pig and deer numbers low enough to improve humidity, cover and food resources on the forest floor.
- Drainage of soils should be avoided, as Powelliphanta in particular requires damp, poorly drained soils. Habitats such as wetland and swampland should be protected, as they are important or critical for Powelliphanta snails as well as several bird species such as bittern, spotless crane and fernbird.
- Restricted access to areas that contain Powelliphanta snails
- Monitoring of snail, possum and other predator numbers before and after poisoning to provide data on the effectiveness of such pest control operation.
- Possum and other pests, including rats, should be controlled within the Powelliphanta snail areas of EOL's.
- Five metre edge buffer zones should be established around snail areas along with an additional fifteen metre buffer zone for desiccant spraying.
- 10 x 10m snail-monitoring plots should be established within identified snail areas. These should be used to measure live snail density annually until population trends and the main causes of mortality are clear.
- Fire clearance operations should not be permitted in areas where snails are present or are likely to be affected by such burn operations.
- Refer Ernslaw Powelliphanta Snail Management Plan for further detail.