

Lord Howe Phasmid (*Dryococelus australis*)

Description

A giant flightless stick insect over 12cm in length. The adult is a honey brown colour with a white stripe down the side, while the juveniles are bright green, turning brown when mature.

Conservation Significance

Endemic species.

Listed as Endangered under the NSW TSC Act 1995.

Listed as Critically Endangered under the Commonwealth EPBC Act 1999.

Distribution

Only known from Ball's Pyramid, confined to a ledge approximately 30m x 5m at about 70m altitude. Although complete surveys have not been carried out, observations by boat and aerial photography indicate other potential sites are limited.

Previously located on the main island, but thought to have become extinct due to predation by Rats in the 1920's.

Ecology

Phasmids burrow in damp leaf debris during the day, and emerge to feed on shrubs of *Melaleuca howeana* at night. Account of Phasmids on the main island prior to extinction indicated they were abundant, nocturnal and lived in cracks in living trees during the day and emerged at night to feed on leaves in the tree canopy. Sexes can be identified by physical appearance.

Population data/health

Phasmids were once abundant on the main island. It was first collected in 1853 by officers on the survey vessel H.M.S. Herald, and is in collections at the Australian Museum. Phasmids were rediscovered on Ball's Pyramid in 2001, and a subsequent survey located 3 individuals that were all females.

A survey in March 2002 located 24 individuals. Ten of these were able to be sexed, and were identified as 8 females and 2 males.

Habitat

The population on Ball's Pyramid is confined to six small *Melaleuca howeana* shrubs, growing because of a water seep nearby. These shrubs provide food and leaf debris layer where the insects can retreat into damp, shaded location during the day.

Threats

Introduction of the rat to Ball's Pyramid could cause the extinction of the species.

The exotic plant species *Ipomoea cairica* may smother the food plant of the Phasmid on Ball's Pyramid Pridel *et al.* (2002).

Random stochastic events.

Impact on other species

Unknown.

References

Etheridge R. jnr. 1889. The general zoology of Lord Howe Island. *Australian Museum Memoirs* No. 2 pp 3-42.

Priddel, Carlile, Humphrey, Fellenberg and Hiscox 2003. Rediscovery of the "extinct" Lord Howe Island stick-insect (*Dryococelus australis*) (Montrouzier) (Phasmatodea) and recommendations for its conservation. *Biodiversity and Conservation* 12:1391-1403