

Gilbert's potoroo is Australia's most endangered mammal. It is only known from a single, very small population on Mount Gardner, near Albany, Western Australia.

Early records of Gilbert's potoroo have indicated that the species has always been restricted to the high rainfall areas of the South West Corner of WA, but was locally abundant in those areas.



Where do they live?

Gilbert's potoroo is only known from within the small area of Mount Gardner Headland of Two Peoples Bay.

It occurs within 4 separate patches of dense vegetation which has not been burnt for over 50 years.

It is likely that unburnt areas are necessary to support the species.

The Threatened Species Network is a community-based program of the Australian Government's Natural Heritage Trust and WWF Australia.

Photo: Gilbert's potoroo

Credit: Bill Wheatley

Early explorers and collectors such as John Gilbert documented that "immense numbers could be captured by aborigines in a single afternoon".

Nowadays, there are fewer than 40 of these marsupials in the wild.

What do they eat?

Gilbert's potoroo relies on a good supply of its favourite food, truffles. Truffles are little cherry sized fungal bodies (known as hypogeous fungi), which are the fruiting bodies of an underground fungus.

Truffles are found just underneath the surface of the soil or down to a couple of inches which is about as far as potoroos will dig. Truffles have evolved as 'bait' for mammals, because mammals dig them up, eat them, defecate the spores elsewhere and thereby spread the fungus. So it's actually to the fungus' benefit to be eaten by the potoroo, and hence it's very tasty, it's very nutritious and it even emits an odour which will attract the potoroo and allow it to find the truffle, dig it up and eat it.

Did you know.....

- Gilbert's potoroo is the most endangered mammal in Australia, and one of the rarest animals in the world.
- This small rat-kangaroo was thought to be extinct since the late 1870's until rediscovered in 1994 at Two Peoples Bay near Albany.
- Despite ongoing searches, no populations have been found outside the Two Peoples Bay Nature Reserve.
- John Gilbert's notes recorded the potoroo as being the constant companion of the quokka.
- It is puzzling that while the quokka persists over much of its range, Gilbert's potoroo has declined so significantly.

What is threatening them?

There are a number of threats facing Gilbert's potoroo:

Feral predators: Gilbert's potoroo is within the critical weight range (35g - 5kg) of mammals thought to be the most susceptible to decline from feral predators. This is because they are the optimal size for both foxes and cats to prey upon.

Potoroo facts

Scientific Name:
(Potorous gilbertii)

Gilbert's potoroo has been declared 'endangered' under Commonwealth's Environment Protection and Biodiversity Conservation Act (1999) and 'rare' under Western Australia's Wildlife Conservation Act (1950).



Foxes can be controlled through regular 1080 baiting (1080 is a poison that is used in meat baits to eradicate feral carnivores). However, a suitable control method for feral cats that does not also have an impact on Gilbert's potoroo is yet to be developed.

Introduced diseases: *Phytophthora cinnamomi* (see below for explanation) threatens to destroy the type of habitat that Gilbert's potoroo is restricted to. This introduced fungus can attack the truffle food sources that the potoroo relies on for survival.

Fire: Wild fire has the potential to wipe out the entire wild population in one disastrous event. The only known wild population is restricted to an area of dense long-unburnt vegetation that is potentially highly vulnerable to wildfire.

Population dispersal: Careful management is required to ensure that the existing potoroo populations do not become overly dispersed. Scattered populations are more prone to predation from introduced animals and they are also less likely to reproduce successfully.

Lack of release sites: Lack of a potential site to release captivity bred potoroos into the wild (that is free from the threats mentioned above) is also a major impediment to the recovery and survival of this endangered mammal.

What is *Phytophthora*?

Phytophthora (pronounced FY-TOFF-THORA) species are soil and waterborne fungi that cause disease and often death to a wide variety of native plant species, exotic fruits and vegetables).

The fungus is native to South-East Asia and probably reached Western Australia around 1900 in orange trees brought in from Indonesia. The first symptoms of infection are yellowing of the foliage, followed by dieback of the entire plant.

Phytophthora cinnamomi is considered a threat to over 1000 plant species worldwide. While it is still uncertain exactly how many species in Australia are threatened, it is expected to be in the hundreds.

What needs to be done?

- Fire exclusion is a high priority for the protection and conservation of the wild population. A captive colony has been established by the recovery team to ensure the single known wild population isn't lost in the event of a catastrophic fire. In addition, stringent fire management plans must be implemented and best fire management practice must be exercised.
- Public awareness of the plight of Gilbert's potoroo needs to be raised. The Gilbert's potoroo Action Group was formed in 2001, and members have become involved in captive breeding and monitoring activities, including a two week radio tracking program in February this year. The location of suitable habitats for relocation is also a priority in the group's activities.
- More research and surveying of potential habitat for new populations needs to be undertaken.
- Best practice management guidelines for the control and prevention of *Phytophthora cinnamomi* need to be developed and implemented.

For further information:

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