

randwick environmental park

invasive species

weeds

In some zones in Randwick Environmental Park low levels of weed infestation indicate that the soil profile is fairly intact and the soil nutrient levels have not been increased by nutrient-rich runoff. The soil seed bank can then be assumed to be intact and viable. Bush regeneration activities are designed to stimulate the seed bank into germination to promote the cycle of plant life at Randwick Environmental Park.

In some zones in Randwick Environmental Park high levels of weed infestation indicate increased soil nutrients, particularly nitrogen and phosphorus, which are found in the faeces of dogs and cats, garden waste and lawn clippings and blue-metal road runoff. Other weed infestations, particularly on the eastern boundary, are the result of landfill and garden waste dumping in the past. Weeds are able to colonise quickly into areas that have highly disturbed soils.



Alternanthera



Cortaderia



Ipomoea Indica

Many species of weeds have infested Randwick Environmental Park including;

- 2 weeds of National Significance (WONS) Bitou bush
- 8 species of noxious weeds- Lantana, Castor Plant, Green Cestrum, Pampas Grass, Blackberry, Prickly Pear, Asthma Weed and Privet
- Over 144 undesirable plant species

Many of these weeds will infest areas of good bushland and create monocultures which restrict native plant regeneration. Weeds also create suitable harbour for pest animal species such as rabbits, foxes and cats. Bitou bush berries also provide food for foxes and its seeds are spread further in fox faeces.

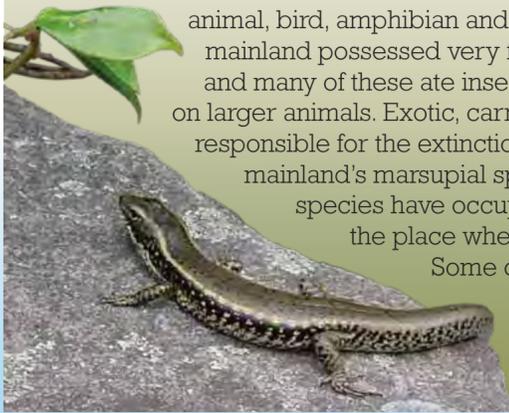


Madeira Vine

pest animals

Some exotic animals, those introduced species from other continents, have had a serious effect on native animals in Australia generally since colonisation and have contributed to the local extinction of many native animal, bird, amphibian and reptile species. Australia's mainland possessed very few carnivorous animal species and many of these ate insects, frogs and birds; few preyed on larger animals. Exotic, carnivorous animals have been responsible for the extinction of many of the Australian mainland's marsupial species while other exotic species have occupied native species' **habitat**; the place where they live, feed and breed.

Some of the pest animals are present in Randwick Environmental Park are foxes, cats, dogs, rabbits and Indian mynas.



managing pest animals

Pest animals are a problem because they;

- predate on native fauna
- compete for local food supplies
- spread weeds through transfer of seed and propagules
- drop faeces which create soil chemical imbalances and effect the growth of native plants
- feed on native seedlings

In sensitive conservation areas such as Randwick Environmental Park, the exclusion of domestic pets is recognised Australia wide as a standard management practice for the following reasons;

Lantana

the effects of phosphorus

The faeces of carnivores, (dogs, cats, foxes, humans!) contain high levels of phosphorus. Phosphorus is easily dissolved in water and gets into soil, wetlands and waterways.

Australian soils are naturally very low in phosphorus because the continent is very old. Australian plants have evolved to deal with very low phosphorus levels.

Consequently phosphorus is highly toxic to Australian plants and will quickly kill them. Phosphorus is very difficult to remove from natural systems requiring huge expense over a long time.

Plants from other parts of the world (weeds) are able to thrive in higher phosphorus conditions.

Result - bushland and wetland ecosystem are irreversibly damaged and their functioning is seriously compromised.

the instincts of cats and dogs

Cats and dogs have a natural instinct to hunt & to mark their hunting territories with urine. Their marking scent frightens native Australian fauna away.

Cats and dogs will hunt and kill birds, lizards and frogs regardless of how well fed they are.

Result - a decline in the number of fauna species able to live in the park and a decline in the size of the populations of any or all of those species.

The effect of dogs and cats is to reduce the variety of all the living things, both plants and animals, that would once have inhabited the area. This is called a 'threatening process'. It is the intent of State and Federal threatened species legislation and recommended management techniques to control and reduce 'threatening processes'.

Blue Tongue Lizard



Bird Nest