



FOX MANAGEMENT in southern Sydney



Since its introduction to Australia nearly 150 years ago the fox has contributed to severe declines and extinctions of a range of native animals. Eleven local councils south of Sydney Harbour have come together to develop a coordinated fox management plan.

Sydney Coastal Councils Group (SCCG), through funding from the Australian Government, supported the development of the Southern Sydney Fox Management Group to find out more about urban foxes and to make fox management a regional focus.

The problem: foxes in Australia

Native Australian animals didn't evolve with foxes and have not developed good strategies to avoid fox predation. As a result, native species as varied as reptiles, frogs and insects are easy prey to foxes and other introduced predators. Ground-dwelling and semi-arboreal mammals (those that spend some time in trees), as well as ground-nesting birds and freshwater turtles are also at risk.

Even *small* numbers of foxes can devastate populations of native animals and jeopardise recovery efforts for threatened species.

Foxes are well known for **surplus killing**: savaging multiple animals at one time but eating few or even none of their victims. In June 2015 a single fox killed nearly a quarter of the little penguin population in Manly in less than two weeks.



Eastern grey possum © Peter Gorman

FOX MANAGEMENT

SYDNEY'S
SALTY
COMMUNITIES

Native species threatened by foxes in the southern Sydney Region

Endangered or vulnerable species which are currently threatened by fox predation in the southern Sydney region include: **pied oyster catcher** (*Haematopus longirostris*); **little tern** (*Sternula albifrons*); **green and golden bell frog** (*Litoria aurea*); **New Holland mouse** (*Pseudomys*

novaehollandiae); **bush stone-curlew** (*Burhinus grallarius*); **powerful owl** (*Ninox strenua*); **giant burrowing frog** (*Heleioporus australiacus*); **long-nosed bandicoot** (*Perameles nasuta*); **eastern pygmy-possum** (*Cercartetus nanus*); and **Rosenberg's goanna** (*Varanus rosenbergi*), amongst others.

Fox predation threatens the survival of species, populations and ecological communities.

Predation by fox is listed as a key threatening process under the Commonwealth Environmental Protection & Biodiversity Conservation Act 1999 (EPBC Act) & the NSW Threatened Species Conservation Act 1995 (TSC Act).



What this project has achieved

Regional approach to fox management	Councils of Bayside, Cumberland, City of Canada Bay, City of Canterbury Bankstown, Georges River, Inner West, Randwick, Strathfield, City of Sydney, Sutherland Shire & Waverley participated.
Relationships with government agencies, research organisations and major landowners	Participating organisations included Centennial Park, Invasive Animals CRC, Greater Sydney Local Land Services, NPWS, Royal Botanic Gardens Sydney, Sydney Airport, Sydney Trains and University of Sydney.
On-ground control	Over 150 foxes were removed from the region, with councils developing the knowledge and systems to implement best practice methods.
Community sightings	The FoxScan app and website recorded 480 sightings in the project period.
Research	20 motion-activated remote cameras were used to monitor foxes & native species; 11 foxes were fitted with GPS collars to understand how they move around the urban landscape and how they can best be controlled; fox scat (poo) was collected to find out what foxes have eaten and what native species are most at risk.
Future	The group will now have a home with the Southern Sydney Regional Organisation of Councils (SSROC) Pest Animal Action Network (PAAN).



This project was able to take practical steps to better research, understand & manage the threat posed by foxes to urban biodiversity. The research under the leadership of the Royal Botanic Gardens Sydney is continuing and results will be published in peer-reviewed journals. This information will provide invaluable data to help Sydney land managers in their work protecting the rich biodiversity present in the environment of our city and suburbs.

How you can help

As part of the program a web portal (foxscan.org.au) was set up to allow anyone to report fox sightings across the region. You can report a fox and play a part in the effort to control foxes and protect native species. The more people who record their fox observations the more we can protect our native species and ecosystems.

Visit www.foxscan.org.au or download the Mobile App to contribute and protect native species.

Your habits can save wildlife

- Don't leave pet food outside overnight
- Use enclosed compost bins
- Keep domestic animals secure at night
- Remove fallen fruit around fruit trees
- Keep garbage bins covered
- Block entry points to drains
- Close off access to underneath buildings
- Use fox-proof enclosures for poultry
- Turn-off outside lights that might attract insects
- Reduce weeds that provide food & shelter, like blackberries

GET THE APP
FOR IOS /
ANDROID

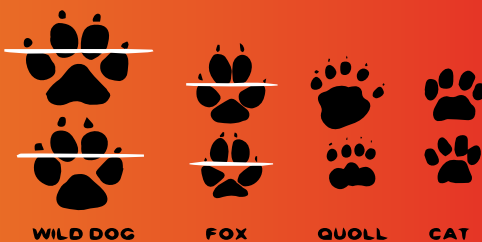


FOX SCAN

Fox with ringtail possum © Pavel German.

Fast Facts

1. Foxes are a major factor in the loss and extinction of many native species.
2. A fox is estimated to eat 20kg of prey in a year, including small mammals, birds and lizards.
3. Foxes have excellent sight, smell, and hearing and are highly effective predators, often killing many more animals than they will eat.
4. You can use the FoxScan app to report foxes you find in your suburb.
5. Research conducted during the program will improve the effectiveness of urban fox control across southern Sydney and beyond.
6. Foxes breed once a year in late winter. Breeding females wean about four cubs.
7. A typical fox family "home range" can vary widely—from 30ha to 1,000ha—and individuals can roam more than 10km a night.
8. 20 motion-activated camera traps and 11 remotely-detaching GPS collars were used to produce the research that will help improve fox management in Sydney.
9. DNA from fox carcasses and scats will help us understand the genetic diversity of foxes.
10. Fox paw prints can be used to identify their presence, and are easily distinguished from those of dogs or other predators. Compared with a dog's, a fox's front and back pads can be separated by a straight line, as shown below.



How to identify fox prints (Pestsmart 2016)



Project area: south of Sydney Harbour

Factsheet text prepared for SCCG December 2016 by Jacob Sife, Principal Ecologist, Ecology Australis.

