



Protecting and restoring Eastern Suburbs Banksia Scrub

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Introduction

As Sydney has developed, much of its original native vegetation has been cleared or disturbed. As a result, many native plants and animals have become isolated in remnants surrounded by urban development. These remnants and the threatened species living in them need to be managed carefully to ensure their survival.

The Department of Environment and Climate Change (DECC) and the Sydney Metropolitan Catchment Management Authority are working with other government agencies and the community to protect these native vegetation remnants, and the threatened species that depend on them, in Sydney.

This brochure explains ways in which you can help preserve Eastern Suburbs Banksia Scrub remnants in your local area. For example, you could join a local bushcare group, or plant appropriate shrubs and trees in your garden.

This brochure also lets you know about the valuable work that is occurring in Centennial Parklands to conserve and enhance Eastern Suburbs Banksia Scrub remnants.

You can obtain other threatened species brochures at www.environment.nsw.gov.au/threatenedspecies or contact the Environment Line on 131 555.

What is Eastern Suburbs Banksia Scrub?

Eastern Suburbs Banksia Scrub is an endangered diverse plant community growing on 100,000-year-old wind-blown dune sand on sandstone. The community once grew extensively on about 5,300 hectares of land between North Head and Botany Bay in Sydney, but less than 150 hectares (or about 3%) of the original extent remains. These remnants are scattered across Sydney's eastern and northern suburbs such as Randwick, Botany Bay and Manly.



Eastern Suburbs Banksia Scrub.
Photo: N. Colman



Eastern water dragons and other lizards use Eastern Suburbs Banksia Scrub as habitat.
Photo: R. Nicolai



Grass trees are a common feature of Eastern Suburbs Banksia Scrub.

Photo: M. Van Ewijk

As a result, Eastern Suburbs Banksia Scrub has been listed as an endangered ecological community in NSW under the *Threatened Species Conservation Act 1995* and the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

The community is characterised by sclerophyllous (hard-leaved) heath or scrub plants, although some remnants contain small patches of woodland, low forest or wetter areas, depending on the depth and fertility of the soil. Some common plants in an Eastern Suburbs Banksia Scrub community include the:

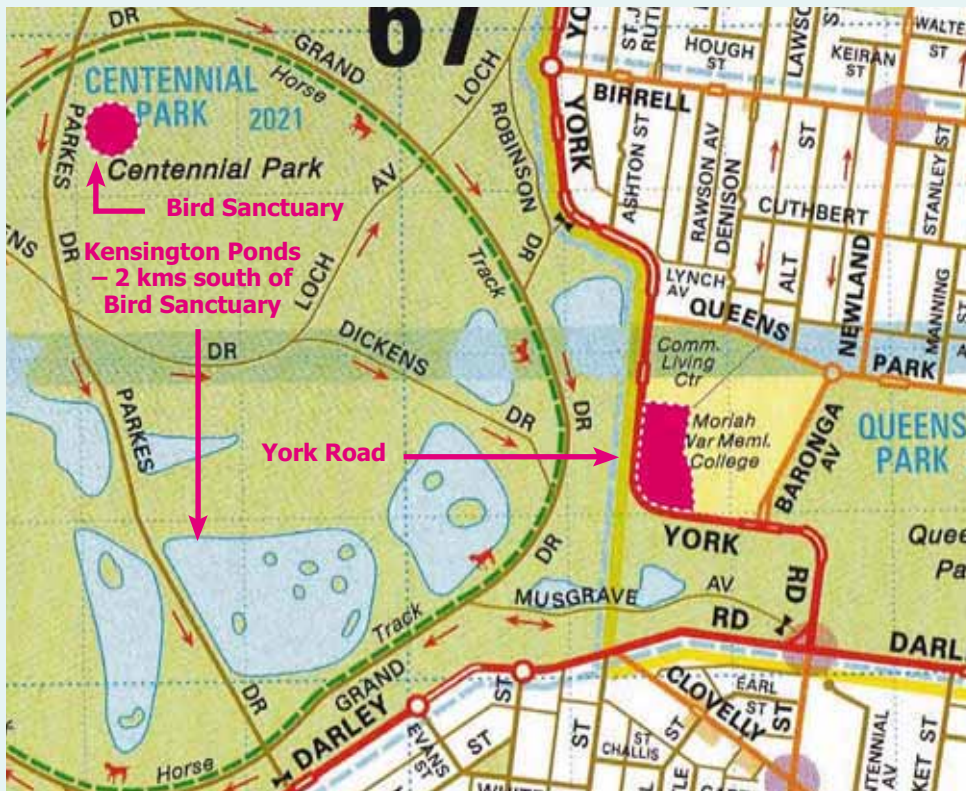
- heath-leaved banksia (*Banksia ericifolia*)
- old man banksia (*Banksia serrata*)
- *Banksia aemula*
- pink wax flower (*Eriostemon australasius*)
- variable sword sedge (*Lepidosperma laterale*)
- coastal tea-tree (*Leptospermum laevigatum*)
- tree broom-heath (*Monotoca elliptica*)
- bracken (*Pteridium esculentum*)
- grass tree (*Xanthorrhoea resinosa*).

Why is Eastern Suburbs Banksia Scrub important?

- It is a unique assemblage of plants, from small trees and shrubs to low heaths and grasses.
- It contains habitat which shelters small native animals such as ringtail possums, blue-tongue lizards and birds.
- It is part of the distinctive landscape of Sydney, and native animals and birds such as eastern rosellas and wattle birds rely on it as a food source.
- It provides a living link with Sydney's natural and historic past.

Eastern Suburbs Banksia Scrub at Centennial Parklands

The lands now known as Centennial Parklands (Centennial Park, Moore Park and Queens Park) were first set aside as Sydney Common in 1811, when there would have been a predominance of Eastern Suburbs Banksia Scrub in the area. Historic records show that major changes have occurred in land patterns across the Common. Most native vegetation had been cleared by 1930 with the remaining Eastern Suburbs Banksia Scrub remnants becoming isolated.



Eastern Suburbs Banksia Scrub sites at Centennial Parklands.
Source: Sydways Map 298

Queens Park site
- 2 kms east of
York Road

Eastern Suburbs Banksia Scrub at Centennial Parklands



The Bird Sanctuary gate was constructed by the Gould League of Bird Lovers in the 1930s.

Photo: L. Holme



Eastern Suburbs Banksia Scrub at the Bird Sanctuary.

Photo: L. Holme



Preparing the York Road site for weeding and ecological burning.

Photo: Centennial Park and Moore Park Trust

The Centennial Park and Moore Park Trust manages four Eastern Suburbs Banksia Scrub remnants within Centennial Parklands totalling 2.87 hectares. These are:

- the Bird Sanctuary (0.9 hectares)
- the York Road remnant (1.07 hectares)
- Kensington Ponds (0.9 hectares)
- Queens Park (0.87 hectares).

The Bird Sanctuary

The Bird Sanctuary is located behind the Centennial Parklands café. It was fenced in 1938 and originally set aside by the Gould League of Bird Lovers as a sanctuary for native birds. When the remnant was recognised as Eastern Suburbs Banksia Scrub in 1998, plans were put in place to manage the area to conserve the remnant. Many of the trees in the bird sanctuary such as hoop pine, sweet pittosporum and gums were introduced to attract birds. These trees have been detrimental to Eastern Suburbs Banksia Scrub species as they shade them and prevent them from getting sunlight.

York Road

The York Road remnant is located adjacent to Moriah College. A few characteristic Eastern Suburbs Banksia Scrub species including coastal tea tree (*Leptospermum laevigatum*), tree broom-heath (*Monotoca elliptica*), coastal wattle (*Acacia sophorae*) and daphne heath (*Brachyloma daphnoides*) form the shrub layer. However, fire had been eliminated from the site, meaning species that need fire to germinate such as old man banksia (*Banksia serrata*) could not grow. Introduced non-indigenous trees, including over 100 pine and eucalypt trees, were overshadowing the plants and forming a thick leaf litter layer, reducing the rate of germination and growth of native remnant species.

The site was struggling to survive before regeneration work commenced in 2003.

Threats

Threats to Eastern Suburbs Banksia Scrub species include:

- shading and competition from taller native trees and non-native weeds
- the build up of a thick leaf litter layer
- increased nutrient levels from stormwater run-off
- changes in soil moisture
- detrimental fire regimes
- the natural regeneration of seedlings being hampered by rabbit grazing, rubbish dumping, trampling and erosion.

Management

The Centennial Park and Moore Park Trust manages its bushland sites by engaging expert bush regenerators, horticultural staff and skilled volunteers. Centennial Parklands has formed a Bushland Management Group, which includes bushcare officers, local and indigenous community representatives, bush regeneration experts and ecologists, and representatives from DECC and the Commonwealth Department of the Environment, Water, Heritage and the Arts.

The group devises vegetation management plans which outline and guide the actions that need to be taken to protect, rehabilitate and manage Eastern Suburbs Banksia Scrub. Staff, professional bush regenerators and volunteers carry out bush regeneration by clearing areas of weeds and accumulated leaf litter so native plant seeds can germinate and plants can grow.



A *Banksia serrata* seedling regenerating after fire.

Photo: T. Auld



An ecological burn at the York Road site in October 2008.

Photo: Centennial Park and Moore Park Trust.



New Holland honeyeaters feed on the nectar from banksias found in Eastern Suburbs Banksia Scrub.

Photo: K. Stepnell

DECC, Sydney Metropolitan Catchment Management Authority and Centennial Parklands staff are working on a joint venture project, using best practice bush regeneration techniques at the bird sanctuary and York Road remnants. The aim is to restore an ecosystem rather than create a bushland garden. Initial removal of non-native trees and leaf litter, and initial weeding, has been followed by burning small dried piles of weeded woody vegetation, and follow-up weeding. Fire may help stimulate the native vegetation, but can also encourage the growth of weeds. Weeds must therefore be controlled before native plant seeds establish, to ensure seeds can germinate without being smothered.

Fires also encourage the new growth of microbial flora and fungi that aid seedling germination and release nutrients such as nitrogen and phosphorus into the soil, which in turn help seeds to germinate and plants to grow and thrive.

Fauna habitat values are also a major consideration in the restoration program. On all sites, dead shrubs and trees have been left in place to build animal habitat and help to prevent soil erosion. Rabbit-proof fencing and measures to prevent stormwater from accessing the site have been introduced at York Road.

Visiting Eastern Suburbs Banksia Scrub sites

Centennial Parklands is accessible to pedestrians and vehicles between sunrise and sunset, when you can visit Kensington Ponds and Queens Park. At both sites you can see the plant species and birds such as New Holland honeyeaters which feed on nectar from the banksias. At Kensington Ponds, you may also be lucky enough to see frogs or turtles.

Please note that public access to the York Road and Bird Sanctuary sites is limited to a number of organised open days each year to allow these areas to regenerate. Contact the Centennial Park and Moore Park Trust on (02) 9339 6699 for information about when these open days are occurring.

Getting there

Five kilometres from Sydney's CBD, Centennial Parklands is easily accessible by bus, train, car and bike, and on foot. Regular bus services are available from Circular Quay, Central Station, Bondi Junction and surrounding suburbs. The Transport Hotline (131 500 or www.131500.info) provides current routes and timetables for Sydney buses and City Rail.

There are cycle lanes along Darley and Alison Roads, Anzac Parade, Federation Way, and South Dowling and Cleveland streets. The park can be reached on foot from Central and Bondi Junction railway stations in about 30–40 minutes. The last Sunday of every season is a car free day at Centennial Parklands.

Be a Centennial Parklands volunteer

Contact Centennial Park and Moore Park Trust on (02) 9339 6699 or visit www.yourparklands.org.au/volunteers/opportunities for information on how you can volunteer to restore Eastern Suburbs Banksia Scrub in Centennial Parklands.



Eastern Suburbs Banksia Scrub.

Photo: N. Colman

Help preserve Eastern Suburbs Banksia Scrub

Join a bushcare group

Bushcare volunteers can provide great assistance to council staff and professional bush regenerators by volunteering a few hours a month. Anyone is welcome to join a group and lend a hand. For more information on walks and talks and potential volunteer bushcare days, visit:

- www.environment.nsw.gov.au/youcanhelp
- www.step.org.au
- www.yourparklands.org.au/volunteers/opportunities.



Volunteer bushcare workers are invaluable in protecting Sydney's endangered native vegetation.

Photo: D. Wilks

Plant Eastern Suburbs Banksia Scrub species in your garden

Of course, you cannot fit the entire Eastern Suburbs Banksia Scrub ecosystem into your backyard, but there might be room for a selection of grasses, shrubs or small trees. Banksias such as old man banksia and heath-leaved banksia, wattles such as sweet wattle and prickly moses, and shrubs such as kunzea, mountain devil and geebung are attractive garden plants and attract birds such as eastern rosellas, wattle birds and eastern yellow robins.

If you live in a neighbourhood that was once part of an Eastern Suburbs Banksia Scrub ecosystem, you could conduct planting programs with your neighbours. A group of backyards can form an important bushland remnant and attract native birds and butterflies to your area.

Your local council will know if you live in such a neighbourhood, and if you do, your council may run a backyard bushcare program. Such programs will help you protect and regenerate Eastern Suburb Banksia Scrub species in your garden to help create bushland corridors.

Council officers may offer:

- free expert advice
- practical training
- realistic action plans
- help with regeneration work
- ongoing support.

Contact your local council to find out if they offer such a program.



Old man banksia (*Banksia serrata*) is one plant often found growing in Eastern Suburbs Banksia Scrub communities.

Photo: DECC

Protect Eastern Suburbs Banksia Scrub from weeds and other threats

Help protect Eastern Suburbs Banksia Scrub remnants from threats by:

- **being careful when mowing lawns** – mowing underneath Eastern Suburbs Banksia Scrub species in residential gardens prevents their seedlings from establishing. By not mowing lawns and by hand weeding rather than poisoning weeds, you will promote the growth of seeds that may still be in the soil.
- **weeding the garden** – removing weeds from local gardens will prevent them spreading into bushland reserves. Birds can transport weed seeds large distances, so it is important to keep a weed-free garden even if you live a long way from an Eastern Suburbs Banksia Scrub remnant.
- **keeping stormwater out of the bush** – if you live near the bush, install a rainwater tank to minimise the impacts of stormwater, and if reusing grey water for watering gardens, use low phosphorus detergents.
- **not dumping rubbish** – never dump garden refuse into bushland, as this helps weeds to spread into the bush.



By hand pulling rather than poisoning weeds, people can promote the growth of Eastern Suburbs Banksia Scrub and protect habitat for skinks and other animals.

Photo: R. Nicolai

Conserve habitat for native animals

- Report any sightings of foxes and rabbits in Centennial Parklands to the Centennial Park and Moore Park Trust (phone (02) 9339 6699), and report any sightings in other parks and reserves to DECC's Environment Line (phone 131 555) or your local council.
- Be a responsible pet owner. Keep pet cats and dogs under control, never let them wander into the bush, and keep them indoors at night. Train your dog not to chase or harass native wildlife. Do not leave uneaten dog or cat food outdoors as this encourages foxes and rats.
- Leave some scrubby tangles and dense, shrubby areas of vegetation in your garden or on bushland you are helping to regenerate for ringtail possums and native birds.
- Leave fallen timber, leaf litter and dead trees with hollows on your land or on bushland you are helping to regenerate for lizards.
- If you have no dead trees with hollows in your garden, you can build a nest box to potentially attract parrots, small insect-eating bats and possums. A nest box can provide a safe place for a native animal to escape the elements and raise young. Always ensure cats and dogs cannot gain access to the nest box, and place it in a tree at least three metres above the ground. If introduced birds such as Indian mynas colonise the nest box, evict them. Several websites contain information on building and placing nest boxes, and some organisations sell them. Search the internet using the following terms: 'nest', 'box', 'native', 'animals' and 'birds'.



Provide dense shrubby areas of native vegetation in your garden for ringtail possums.

Photo: DECC



Build a nest box for a native animal.

Photo: L. Holme

Native wildlife can suffer injuries through encounters with domestic animals, motor vehicles or misadventure. If you come across injured wildlife, immediately contact Sydney Metropolitan Wildlife Service on (02) 9413 4300 or WIRES on (02) 8977 3333.

For more information about Centennial Parklands' Eastern Suburbs Banksia Scrub remnants, contact the Centennial Park and Moore Park Trust on (02) 9339 6699.

For more information about Eastern Suburbs Banksia Scrub, contact DECC's Environment Line on 131 555.



Yellow-tailed black cockatoos visit Eastern Suburb Banksia Scrub remnants when banksias are flowering.

Photo: DECC

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The Department of Environment and Climate Change and Sydney Metropolitan Catchment Management Authority would like to thank Centennial Park and Moore Park Trust horticultural staff for their assistance with this project.

Front cover photographs:
Eastern Suburbs Banksia Scrub – photo: N. Colman;
eastern rosella – photo: N. Olliff

Published by:

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DECC 2009/68
ISBN 978 1 74232 092 2
January 2009
Printed on recycled paper