



Protecting and restoring grey-headed flying-fox habitat

Contents

Introduction	1
About grey-headed flying-foxes	1
Why are grey-headed flying-foxes threatened?	2
Why are grey-headed flying-foxes important?	3
Living with flying-foxes	3
Cabramatta Creek flying-fox colony	5
How you can help	7
Further reading	inside back cover

Introduction

As Sydney has developed, much original native vegetation has been cleared or disturbed. As a result, many native plants and animals have become locally extinct, or there are so few of them living in isolated communities that they are threatened with extinction.

The Department of Environment and Climate Change and Sydney Metropolitan Catchment Management Authority are working with local government and the community to protect Sydney's remaining threatened species.

This booklet explains how you can help save the endangered grey-headed flying-fox (*Pteropus poliocephalus*). For example, you could volunteer to work with a bushcare group that is planting food or roost trees for a local flying-fox colony, or create some flying-fox habitat in your garden. This brochure also lets you know about valuable work already occurring to preserve the Cabramatta Creek flying-fox colony.

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

About grey-headed flying-foxes

Grey-headed flying-foxes are large mammals, with dark grey fur on the body, lighter grey fur on the head and a russet collar encircling the neck. They can be distinguished from other flying-foxes by their leg fur, which extends to the ankle.

Flying-foxes normally roost in camps with others of their kind. They rest during the day, then join the commuter rush at dusk, flying to other locations to find food. Flying-foxes eat pollen and nectar and the fruits of many trees and shrubs. They can fly at around 25 km per hour and will usually forage within a radius of up to 30 km from their



Grey-headed flying-fox mother and baby

Photo: Vivien Jones



Old man banksia (*Banksia serrata*) is a favourite food tree for the grey-headed flying-fox

Photo: DECC



This flying-fox is one of many making up the Cabramatta Creek flying-fox colony

Photo: Cate McIntire, Fairfield City Council

camp. Once at their destination, they start their job as forest-makers. In foraging for food, they pollinate native trees and shrubs, and in flying from food to roost sites they disperse the seeds of native plants, helping forests and other areas of native vegetation to thrive.

Grey-headed flying-foxes are nomadic, meaning they move from camp to camp in response to food availability. The numbers of flying-foxes in a camp may fluctuate throughout the year, depending on the amount of food available locally. Individual flying-foxes have been known to travel up to 900 km in a year, travelling along the coast and ranges in search of food and new camps to rest in.

Unlike microbats, flying-foxes do not use echolocation for navigation. They use their excellent eyesight and keen sense of smell to find food and to navigate over long distances.

Flying-foxes spend hours grooming and keeping themselves clean, although you may sometimes notice a distinctive musky smell associated with flying-fox camps. This 'perfume' comes from a special scent gland on the neck of the male flying-fox. The scent is used to mark territories and attract female flying-foxes.

Grey-headed flying-foxes are found along the east coast of the Australian mainland, ranging from Mt Gambier in the south-eastern corner of South Australia to Gladstone in Queensland.

Why are grey-headed flying-foxes threatened?

Flying-foxes are mammals, with the females giving birth to only one live young each year. This is one reason why flying-foxes are very fragile. Their population in Australia was around several million at the time of European settlement but now is fewer than 500,000 individuals. This population decline has led the NSW, Victorian and Australian governments to list the species as being vulnerable to extinction.

Flying-foxes have been unjustly regarded with suspicion throughout history. One of Captain James Cook's officers described a flying-fox as: 'black as the devil with wings. And horns on its head'.

The primary threats affecting grey-headed flying-foxes in the twenty-first century are loss and degradation of foraging and roosting habitat, destruction through conflicts with commercial horticulturalists, and competition for resources from the black flying-fox. Other threats include electrocution on powerlines, entanglement in netting and on barbed-wire, climate change and disease.

Why are grey-headed flying-foxes important?

Grey-headed flying-foxes:

- are the third smartest creature alive in the world today after humans and the chimpanzee
- are Australia's largest bat, with a combined head and body length of 23–29 cm and a wingspan of up to a metre
- are, together with other species of flying-fox, the only mammals in the world capable of active sustained flight
- help native forests and trees other animals rely on to survive, as they pollinate trees and disperse seed.

Bats comprise the second largest group of mammals after the rodents, with over 900 species worldwide.

Living with flying-foxes

Flying-foxes are protected under State and Commonwealth legislation, and it is illegal to harm them, handle them or try to move them. Flying-foxes that visit your garden at night are likely to be feeding on the fruits and flowers of trees, which will only be available for a short time (usually 2–4 weeks). Flying-foxes will then leave your garden and move on to other food sources.



Grey-headed flying-fox

Photo: Alan Kwok



Flying-foxes spend their days resting in trees

Photo: Kylie McClelland, DECC

If you find the flying-foxes irritating, it may help to trim tree branches hanging close to your house. Check with your local council before doing this. Also, by bringing your washing inside before dusk, you will ensure it remains free from staining or odour.



Artwork: 'Hanging around in suburbia' by Carmen Beesley Drake, Rockhampton. Courtesy Queensland Government

All Australian bats have the potential to carry the Australian bat lyssavirus.

If you are bitten or scratched by a flying-fox you should immediately flush the wound thoroughly with soap and water, e.g. for approximately five minutes, and then contact your doctor. A highly effective vaccination is available to treat the disease.

Do not try to catch the flying-fox. Only persons who are appropriately vaccinated and trained should handle these animals.

If you find an injured flying-fox, **do not pick it up.** Immediately notify your local animal rescue organisation. In NSW, phone Sydney Metropolitan Wildlife Service on (02) 9413 4300 or WIRES on 1300 094 737.

Cabramatta Creek flying-fox colony

The Cabramatta Creek flying-fox colony is one of several large colonies in the Sydney region. It is mainly a roost site, being home to mostly female flying-foxes and their young.

The colony is located on a peninsula on the boundary between Cabramatta and Warwick Farm, approximately 30 km west of Sydney city centre. It is 2.8 hectares in area, bounded on three sides by Cabramatta Creek. It contains the remnants of two endangered ecological communities: River Flat Eucalypt Forest and Swamp Oak Floodplain Forest, which provide habitat for native species including three mammals as well as the grey-headed flying-fox, thirty birds, four amphibians and five reptiles.

Helping flying-foxes at Cabramatta Creek

The Cabramatta Creek Flying-Fox Committee is made up of a group of volunteers who meet regularly with representatives from Fairfield City Council to discuss ways of managing the Cabramatta Creek flying-fox colony. Committee members help improve habitat at the reserve, care for sick or injured flying-foxes and educate the community about the colony.

Professional bush regenerators and local community volunteers are restoring local native roosting trees, such as swamp oak (*Casuarina glauca*), at the colony. They have removed weeds such as madeira vine (*Anredera cordifolia*) and balloon vine (*Caridiospermum grandiflorum*) which were smothering the trees, meaning the flying-foxes had nowhere to shelter or escape from the heat in summer. Interestingly, the weed species broad-leaved privet (*Ligustrum lucidum*) was providing habitat for the flying-foxes, so it is being removed gradually as native species revive.

Weeds such as bridal creeper (*Asparagus asparagoides*), blackberry (*Rubus fruticosus*) and trad, also known as wandering Jew (*Tradescantia fluminensis*), which smother



Cabramatta Creek flying-fox colony

Photo: Nick Colman



Treating a severely dehydrated flying-fox

Photo: Katie Cabezas,
Fairfield City Council



Visitors to the viewing platform

Photo: Fairfield City Council

native groundcovers, are also being removed and native species are being allowed to re-establish or are being planted from local seed stock.

Special water tanks have been installed so the flying-foxes will be sprayed with a fine mist to cool them down during very hot weather.

Fairfield City Council is liaising with neighbours about keeping domestic animals away from the reserve.

Getting there

To see the flying-foxes at Cabramatta Creek, visit the viewing platform installed by the council. The platform is a short walk or bicycle ride of just over a kilometre from Cabramatta Station along Broomfield St and Liverpool Road. Private bus routes 830, 831 and 833 also terminate at the bus interchange at the station. You can also walk 1.5 km north from Warwick Farm Station along the Hume Highway.

If travelling by car, access is via Liverpool Street when heading north along the Hume Highway between Warwick Farm and Lansvale. If travelling south, turn right into Cabramatta Road and left into Lovoni Street which will bring you to Liverpool Street.

Access to the reserve is via the laneway behind the motel and conference centre. It is a short walk from Liverpool Street to the viewing platform, where you can read information about flying-foxes.

The flying-foxes can be seen right in front of you from this point. Please keep quiet, and move slowly and quietly so the colony is not disturbed or frightened. There is a short track leading down some stairs from the viewing platform along the creek bank towards Cabramatta Bridge.

How you can help

Plant food trees for flying-foxes in your backyard

By planting food trees for flying-foxes in your backyard, you will attract these native mammals to your garden for up to four weeks while they feed on the flowers or fruits of your tree. Once the flowers are dead or the fruit is finished, the flying-foxes will move on.

Talk to your council about locally native species that are a suitable size for your garden. Trees that flying-foxes feed on include the broad-leaved lilly pilli (*Myrtaceae acmena hemilampira*), old man banksia (*Banksia serrata*) and various flowering eucalyptus species.

By planting native trees, you will also attract native birds and butterflies to your garden.

Protect your fruit trees without harming flying-foxes

Do not try to protect a fruit tree from flying-foxes by throwing loose netting over it. Hundreds of flying-foxes and other native animals are injured or killed each year when they become tangled in loose netting.

Instead, attach netting to a purpose-built frame and pull it tight like a trampoline. Alternatively, you can drape shade-cloth over the fruit tree.

Never use thin nylon (monofilament) netting material, which can harm birds and other wildlife as well as flying-foxes, but use durable knitted netting with holes 40 mm wide or smaller. Make sure the netting is white, not green, so animals can see it and avoid it.

For more information about netting, visit www.environment.nsw.gov.au/threatenedspecies/Flying-foxControlInCommercialOrchards.htm



Grey-headed flying-fox

Photo: Brynley Walters



Grey-headed flying-fox at Cabramatta Creek flying-fox reserve

Photo: Cate McIntyre, Fairfield City Council



Bush regenerator at Cabramatta Creek flying-fox reserve

*Photo: Katie Cabezas,
Fairfield City Council*

Volunteer to help flying-foxes

You can help the grey-headed flying-fox recover. Contact your local council to find out about bushcare or recovery projects in your area, or contact one of the organisations listed below. There is interesting work available for volunteers.

The Cabramatta Creek Flying-fox Committee.

P.O. Box 430, Bonnyrigg, NSW 2177.

Tel: (02) 9725 0222.

www.fairfieldcity.nsw.gov.au

Ku-ring-gai Bat Conservation Society Inc.

P.O. Box 607, Gordon, NSW 2072.

www.sydneybats.org.au

The Australasian Bat Society Inc.

P.O. Box 481, Lindfield, NSW 2070.

<http://ausbats.org.au>

For more information about grey-headed flying-foxes, visit www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10697

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