



Environment,  
Climate Change  
& Water

# Flying-foxes of NSW

Flying-foxes are nomadic mammals that travel up and down the east coast of Australia feeding on native blossoms and fruits, spreading seeds and pollinating native plants.

Three species of flying-fox are native to NSW:



Grey-headed flying-fox



Black flying-fox



Little red flying-fox

The grey-headed flying-fox is easily recognisable by its rusty reddish-coloured collar and grey head. It is also the most vulnerable because it competes with humans for prime coastal habitat along the South-East Queensland, NSW and Victorian coasts.

Flying-foxes roost in trees during the day, and establish permanent and semi-permanent 'camps' near food sources and for birthing. Camp-sites where young are born can become very important to flying-foxes – some camp-sites in NSW have recorded use for over a century.

In 2010, many grey-headed flying-foxes have been found roosting and foraging outside of traditional areas. Some have been found as far inland as Orange and as far south-west as Adelaide. Researchers speculate that these far-ranging movements of flying-foxes could be related to food scarcity, nectar flows or seasonal variations, and are uncertain whether such movements will be repeated.

## Social and vocal

Flying-foxes are intelligent mammals, with excellent night vision and an acute sense of smell that helps them find nectar and navigate their way along the Australian coastline. Their legs have small muscles, which make them light enough to fly, but this means they are not strong enough to stand upright.

Social and at times very noisy, flying-foxes have over 30 distinct calls they use to defend their territory, find their young and attract mating partners.

It takes three years for a female flying-fox to become sexually mature, after which she will give birth to only one pup per year. Pups are dependent for at least six months. This slow reproductive rate means flying-foxes are unable to increase their population numbers rapidly.



V. Jones



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J. Turnbull

If you are bitten or scratched by a flying-fox, thoroughly wash the wound, apply an antiseptic solution and see your doctor immediately.

Even though no flying-fox to dog or cat transmission of disease has been recorded, dogs and cats should be kept away from flying-fox roost sites where possible.

## Where to find more information

### Who do I contact?

DECCW Environment Line, Ph: 131 555 or (02) 9995 5555

Email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au)

For more information go to:

[www.environment.nsw.gov.au/flyingfoxes](http://www.environment.nsw.gov.au/flyingfoxes)

For sick or injured animals please contact:

WIRES, Ph: 1300 094 737

Website: [www.wires.org.au](http://www.wires.org.au)

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## Why are flying-foxes important?

Flying-foxes help pollinate plants and spread seeds, ensuring the survival of our native forests. They do this over much larger distances than birds or insects.

## Vulnerable? But I see so many!

The grey-headed flying-fox is a native species and is thus protected. It is also listed as Vulnerable to extinction under NSW and national threatened species legislation.

### *A species does not need to be rare to be under threat!*

The grey-headed flying-fox was listed as Vulnerable because of declining numbers and the key threat of habitat loss.

Records indicate that grey-headed flying-foxes may once have numbered in the millions but have now reduced to as few as 400,000 – scientists estimated that the species had declined by 30% in the decade prior to listing.

The low birth rate of flying-foxes means that numbers cannot rebound as quickly as many other species.

## What's impacting on flying-fox habitat?

Loss of habitat is the main threat to flying-foxes and is a key cause of their conflict with humans.

Developments along the coast are increasingly competing with existing flying-fox habitat and bringing them into closer contact with humans. Flying-foxes may be more visible simply because their key remaining habitat is near our homes and farms.

Habitat loss has meant flying-foxes are more affected by weather events and years of native food scarcity. Urban gardens and rural orchards are now providing flying-foxes with food when natural sources are scarce.

Other human-related impacts on flying-foxes include injuries from getting caught in barbed wire fences, electrocuted on power lines, and legal and illegal shooting.

## Flying-foxes and commercial orchards

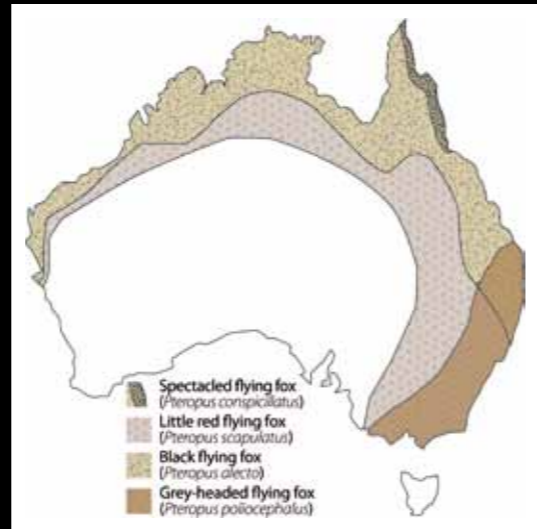
When natural food is scarce, flying-foxes will target any readily available food source – including backyard and commercial orchards of stonefruit, pome fruit (such as apples or pears), lychees, paw paw and coffee.

### *Protecting your crops – netting and alternatives*

Full-exclusion netting is the only reliable method for protecting crops from damage by flying-foxes. Full-exclusion netting consists of a rigid structure of poles and tensioned cables over which netting can be tautly and permanently held.

Other deterrents include recorded sounds, flashing lights and scare guns or other devices; however, there is little evidence of success for methods other than netting.

Protecting the livelihood of growers is important to the NSW Government and information is available to determine the best strategies for protecting crops – see the Department of Environment, Climate Change and Water (DECCW) and Industry and Investment NSW websites for more information. Low interest loans are also available from the NSW Rural Assistance Authority for netting. For eligibility criteria and further information go to: [www.raa.nsw.gov.au/](http://www.raa.nsw.gov.au/)



Adapted from Hall & Richards 2000



Qld Department of Employment, Economic Development and Innovation



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## Section 120 General Licences

As a last resort, after other methods have been tried, DECCW will issue licences to property owners to kill a limited number of flying-foxes by shooting only. This occurs under section 120 of the *National Parks and Wildlife Act 1974*, where flying-fox damage has occurred to property.

Please contact your Regional DECCW office for more information.

## Flying-foxes in urban areas

### *There are flying-foxes in my backyard, what do I do?*

Flying-foxes prefer tall and reasonably dense vegetation for their camps. If you see flying-foxes in your garden do not worry – they are most likely feeding on the fruits and flowers of trees and if they stay overnight they should only remain for a short time (usually 2–4 weeks). Flying-foxes will then leave your garden and move on to other food sources.

### *Too close, too noisy or too many?*

If you are concerned about flying-foxes in your area, please contact your local DECCW office.

Smelly? It's not bat droppings you smell, it's how the males compete for female attention and the best roosting site!

## How do I protect my backyard trees?

Netting is the best option to protect your fruit – see the DECCW website for more information and key requirements to ensure flying-foxes are kept out and are not injured in the process.

### *What about large camps of flying-foxes?*

DECCW has a Flying-fox Camp Management Policy that acts as a guide to interactions between flying-foxes and the public. There are methods to reduce existing conflicts with flying-foxes; for example, by managing vegetation and discouraging flying-foxes from certain sites before they roost there.

New developments should take into account nearby flying-fox habitat. Relocation of flying-fox camps is particularly difficult and will only be approved as a last resort.

## What do I do if I find an injured flying-fox?

If you find a flying-fox alone or on the ground it is probably injured and you should report it to the NSW Wildlife Information Rescue and Education Service (WIRES). You should not approach or handle a flying-fox.

## What about diseases – am I at risk?

Catching a disease from a flying-fox is extremely unlikely. Australian bat lyssavirus and Hendra virus are two diseases associated with flying-foxes, but they are extremely rare.

To ensure safety:

- Do not approach or handle flying-foxes
- Use protective gloves when moving dead flying-foxes
- Do not locate animal feed or water troughs near trees where bats may feed or roost.



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