



The **FoodForWildlife** Project



Photo: Theo Allofs



What is the Food for Wildlife project?

In 2002, the *Food for Wildlife* project worked with the community and local governments to increase native food resources and habitat for urban wildlife. With the help of over 40 community and school groups, the *Food for Wildlife* project planted over 31,000 suitable native plant species within the foraging range of five flying fox camps located in south-east Queensland.

These camps were located at:

1. Sparkes Hill, Alderley;
2. Norman Creek, Coorparoo;
3. Indooroopilly Island, Indooroopilly;
4. Meakin Park, Logan;
5. Woodend, Ipswich.



Project Outcomes

Three major outcomes were successfully achieved over the life of the *Food for Wildlife* project.

1. Expansion of the urban bushland mosaic through the planting of additional trees in remnants used by flying foxes and other fauna as food sources. Particular emphasis was placed on planting trees that flower or fruit at times of frequent food shortages (i.e. October, November and December).
2. Rehabilitation and expansion of habitat for flying foxes and other fauna by planting fast growing roost trees at the five flying fox camp sites. This will provide alternate roost sites for flying foxes and reduce pressure on existing mature trees.
3. Increased community awareness and appreciation of the role of flying foxes in the maintenance of biodiversity in urban bushland remnants.



Why plant for urban wildlife?

Land clearing for agriculture and urban development, in conjunction with irregular rainfall patterns, has led to gaps in native fruit and nectar production in south-east Queensland. Urban wildlife, such as possums, gliders, birds and flying foxes, have been severely affected by this resource shortage.

Flying foxes have been particularly affected and their numbers have been falling due to a lack of food resources within their natural range. This resource shortage has led the flying fox to search for alternative food sources at orchards (or the backyard mango tree!) which often leads to controversy.

By providing additional native food plants close to remnant urban bushland and in parks it is hoped that the possibility of conflict caused by flying fox and human interaction will be reduced. In addition, enhancing existing campsite vegetation will ensure less likelihood of flying fox colonies dispersing to residential areas.

The *Food for Wildlife* project achieved direct on-ground results to increase the numbers of food plants for flying foxes and other urban wildlife. The project was also instrumental in delivering community education strategies that raised positive awareness and appreciation of these misunderstood animals.



Photo: Amanda Fox

Community volunteers at a Food for Wildlife planting.



Urban Flying Foxes - Why are they here?

Flying fox populations are becoming increasingly urbanised along Australia's east coast. This is largely due to the relatively reliable flowering and fruiting of suitable plants cultivated in gardens and public green spaces as opposed to the unpredictable flowering and fruiting patterns of the remaining native forest patches. Despite the greater reliability of food in urban areas, seasonal food shortages in south-east Queensland regularly impact on urban wildlife.

The clearing of Australia's native forests for agriculture and urban expansion has created seasonal shortages in the availability of food for flying foxes. Whether we like it or not, flying foxes will continue to move into urban areas so long as we continue to clear our native forests at an alarming rate.



Land Clearing - a threat to wildlife

The clearing of vegetation for agriculture and urban development is the greatest threat to the future of native wildlife populations. The maps below highlight the extent of clearing that has taken place in eucalypt-dominant ecosystems in eastern Australia since European settlement.



Tree Cover (pre 1788) Tree Cover (early 1990's)

(Source: AUSLIG 1997)



Our Forests Rely on Foxes that Fly!

The nocturnal foraging habits of flying foxes coupled with their ability to fly long distances give flying foxes a unique role amongst pollinators and seed dispersers in maintaining genetic diversity amongst isolated forest patches.

While foraging for food, flying foxes transport pollen and seeds between trees. As forests diminish in size and become increasingly patchy, the distances between these forest patches can no longer be covered by other pollinators such as insects and birds. Thanks to their size (up to 1kg), wing-span (up to 1.2m) and flight speed (~25km/h), flying foxes hold a vital role in maintaining the genetic health of our forests.

Recent research indicates that a number of plant species of economic importance such as Spotted Gum (*Corymbia citriodora*) actually pollinate and produce most of their nectar at night. This makes these species especially reliant on nocturnal pollinators such as flying foxes.



Hypothesis of Co-dependence

Scientists have identified a long association between flowering plants and flying foxes that has led to a theory of co-dependence. This theory is based on the following observations:

- the distribution patterns of flying foxes and myrtaceous forests (ie. eucalypt-dominant forests) are closely correlated;
- flying foxes have a keen sense of smell that is essential for food location;
- their eyes are adapted for nocturnal vision and are able to see light colours very well;
- in normal conditions (without drought), myrtaceous forests provide a constant food supply throughout the year for these animals;
- Myrtaceae blossom is the primary food for flying foxes;
- flying foxes may be the only seed dispersal agent for a number of rainforest species.

The survival of native forests is therefore closely tied to the survival of flying foxes. Planting native plants will help to ensure a future for flying foxes and maintain the health of our native forests.

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