Friends of Bo



# Shooting flying-foxes - new conditions apply from 1 July, 2015

In 2009 The NSW Flying-fox Licensing Review Panel found that:

- Shooting flying-foxes is ethically and legally unacceptable
- Shooting does not effectively reduce crop damage when large numbers of flying-foxes visit orchards
- Exclusion netting would successfully mitigate crop damage

In 2011 a netting subsidy was introduced for orchardists in the Sydney Basin and Central coast regions. This was extended to the whole of NSW in 2014.

Special Circumstances for issuing licences to shoot flying-foxes have now been finalised and will apply from 1 July this year.

Orchardists can apply for a licence if:

- The orchard was established before 1 July 2011 (assumes newcomers to the industry would be aware of potential flying-fox impacts)
- The flying-fox are impacting on crops types for the first time (unprecedented incursion)
- Netting is not possible because of topography or other physical constraints
- Local council has declined an application to install netting
- The flying-fox impact is unanticipated and not regular

If an orchardist has been issued a licence between 1 July 2001 and 30 June 2014, they can continue to apply until 1 July 2020 (acknowledging the role shooting has played in their management practice as well as potential financial challenges).

Office of Environment and Heritage will continue to maintain a register of all licences issued under section 120 of the National Parks and Wildlife Act 1974 and will publish them on the OEH website.

For full details, definitions etc., visit the OEH updated web page:

http://www.environment.nsw.gov.au/wildlifelicences/s120licence.htm



Viewing the nightly fly-out from Rosedale Rd Bridge is popular. Here, Marjorie in the fluoro vest (to the right) is explaining counting procedures to interested onlookers.

## Citizen Science - our own impressive example!

newsletter

Issue 116 March 2015



Marjorie Beck, a very active KBCS member since 1994, recently retired from 'counting' flying-foxes.

Marjorie and her husband Rolf began counting 20 years ago in 1995 when a radio-tracking study of juvenile flying-foxes commenced. For three years counts were conducted weekly. At the end of the study Marjorie and Rolf commenced monthly counting. Rolf finished in 2012 but has always been available to count if not enough counters can be found.

Their dedication is impressive and has been a valuable contribution to understanding the behaviour of grey-headed flying-foxes. For many years Marjorie collaborated with Dr Peggy Eby. The monthly evening count would take place on the same day that Peggy made a morning check for the presence or absence of individual flying-foxes in selected trees in the reserve. Breeding success/failure was monitored over each summer by Dr Eby.

One of the facts to come out of this collaboration was that females with quite large young would leave this camp or come to it from another. Before this, it was generally believed that once young were born, females stayed in the same camp for the summer. Certainly males defend their territory in the same tree for the breeding season and attract females to join them.

Marjorie organised and trained counters. Ideally six people are needed, two on each fly-out route: Rosedale Road Bridge, Maytone Avenue and near Darnley Oval. The estimates of the counters at each location are averaged and the three averages totalled for the overall estimate.

## You too can be a citizen scientist!

KBCS member Leonie Bayley has been counting with Marjorie for some time now and is keen to continue, but needs extra helpers. It's not a huge time commitment but really important as a way to monitor local bat populations, especially for the national census. Training provided!

If you can help with monthly counts, contact web@sydneybats.org.au and we can pass on your details.

## 'DEATH TRAP' netting for fruit trees

The use of fine, monofilament netting in suburban gardens to 'protect' one or more fruit trees is causing injury & death to native wildlife which easily become entangled in this loose, wide-aperture netting. The incidence of wildlife entrapment is increasing exponentially, particularly in Sydney's western suburbs. Birds & animals are feeding more in gardens due to reduction of their natural habitat because of increasing urbanisation. Echidnas, snakes, lorikeets, kookaburras, sugar gliders and possums are also regularly entrapped by substandard netting.

It is heartbreaking to see the distress & often fatal injuries inflicted on the animals which wildlife groups are called to rescue.

#### **Risk of personal injury**

The issue of substandard netting is not only one of unwanted capture of wildlife; it is also involves public risk and welfare of wildlife volunteers who often have to climb trees and/or ladders and cut a struggling, injured animal out of netting several metres above ground.

Property owners who try to release frightened animals are in danger of being bitten or scratched. **Only vaccinated wildlife carers should handle flying-foxes or fruit bats.** Similarly, snakes that are entangled in netting, can only be rescued by licensed wildlife experts.

## Wasted money, damaged fruit Wide-aperture netting draped over the tree is a waste of time & money because it does not protect fruit, as animals can feed through the netting. Safe netting is

## Where are the flying-foxes?

Estimates of the total population of grey-headed flying-foxes in recent years has varied between 350,000 and 650,000 (National Flying-fox Census - more information on this in our next newsletter).

Compare this with the human population in Australian states (Queensland, NSW, Victoria and South Australia) where the grey-headed flying-fox occurs: over 20 million. As 90% of this population clusters along the coastline in each state, most of the human population overlaps the distribution of the grey-headed flying-fox which, like us, lives where the most reliable rainfall produces the best food.

very fine gauge, with apertures of 5mm x 5mm or less, and looks similar to firm mosquito netting. Shade cloth, with less than 30% sun block, is a readily available product which can be used as 'wildlife friendly' fruit tree netting.

If a child can stick their smallest finger through the netting, then the aperture is too large. Fine gauge netting also protects fruit from damage by fruit fly and coddling moth.

### Resolving the "bad" netting issue

Efforts are also being made to make retailers, such as Bunnings & Masters, aware that 'wide aperture' netting does not work. Along with other colleagues, I am writing letters and distributing pamphlets which ask that all suppliers of fruit tree/garden netting remove wide-aperture netting from their stores permanently, and encourage their customers to replace the inferior netting with wildlife friendly netting.

In 2014, Sydney Wildlife requested an official ruling from the Department of Fair Trading (DoFT) that the substandard netting is '**not fit for purpose'**, because it does not protect fruit and therefore is in breach of basic consumer laws. It is also in breach of 'animal cruelty' and 'causing harm to a protected species' laws.

I have asked the Environment Defender's Office (EDO) to consider our options. A colleague from Sydney Wildlife feels strongly that if the EDO supports our 'not fit for purpose' substandard netting claim, then we will go back to DoFT and ask that they review our case. We hope that all varieties of wide gauge/ aperture 'bird netting' is classified not fit for sale, thereby achieving a total ban on the importing & sale of this product Australia-wide.

### In Conclusion

With the uptake of wildlife-safe netting we anticipate a reduction in netting captures by over 90 per cent. We encourage everyone to enquire whether wildlife safe netting is sold at their local hardware store, and if not, why not.

The upgrade to **correct** fruit tree/garden netting will inevitably resolve an intractable problem for wildlife, the property owner & the wildlife rescuer.

Detailed advice about wildlife friendly netting & correct installation can be found at:

### www.wildlifefriendlyfencing.com

Click on "Netting" for link to extensive information on safely netting backyard fruit trees.



Juvenile grey-headed flying-fox hangs safely from wildlife-friendly netting

#### Tim Pearson

The graph below shows estimates of grey-headed flying-fox population in Ku-ring-gai Flying Fox Reserve as counted by the Royal Botanic Gardens Sydney and volunteers, in 2014/2015.

Since 'counts' began in 1995, numbers have never been this low in December and January. We don't know if it is due to disturbance of the camp or whether there is better food elsewhere.



## **Canopy Restoration Project - Ku-ring-gai Flying-fox Reserve**

Nancy Pallin



Ku-ring-gai Flying-fox Reserve Legend: Yellow – reserve boundary Orange : February 2015 extent of flying-fox camp Light Green: area previously infested with madeira vine which destroyed canopy trees Dark green ovals: regeneration exclusion plots Dark green rectangles: planting of long-stem coachwoods

In 2005, the light green area on the map above, where the sewer from Waugoola Street crosses Stoney Creek, was a dense mass of weedy vines, privet, ginger lily and trad. No live canopy trees were left. From the distribution of the very invasive madeira vine, it is highly likely tubers were brought here in soil used to fill trenches after the sewer was installed.

Madeira vine (*Anredera cordifolia*), a native of tropical south America, is recognised as one of the 32 <u>Weeds of National</u> <u>Significance</u>. It destroys forests by climbing into the canopy, excluding light and breaking branches. Landowners are obliged to control and eventually eradicate such weeds.

Increasingly effective methods have been used by Council bush regeneration staff and contractors to remove these vines from the Reserve. Methods include spraying with a mix of herbicides during rapid growth and hand picking tubers from the ground for disposal. Vines in the reserve along Stoney Creek have now been removed from canopy trees and growth from tubers in the ground is regularly treated. To avoid re-infestation, vine treatment has now extended upstream beyond the reserve and west of Rosedale Road. Vines such as balloon vine and morning glory are treated at the same time. This strategic approach is funded by Council's Environmental Levy.

### **NSW Environmental Trust Grant**

With support from KBCS, Ku-ring-gai Council obtained a \$70,000 grant from the NSW Environmental Trust. It is called Ku-ring-gai Flying-fox Canopy Restoration Project, and work will be undertaken over three years.

Flying-foxes used to roost in the central part of the reserve but, due to the loss of trees through defoliation and weed invasion, combined with extensive and persistent wallaby grazing and lack



Above: bush regenerators collecting thousands of madeira vine tubers. Below: The same area in 2015 and after the vines have been removed.



of fire, there has been major decline of the forest. The flying-foxes shifted their camp to the north side of the reserve into tall turpentines and blackbutts which receive plenty of sunlight. (This location, next to houses, has disturbed the neighbours and resulted in Council's decision to remove trees over 3m tall within a 10m buffer.)

The Canopy Restoration Project aims to achieve:

- 1. a structurally diverse core area through regeneration along the lower slopes of Stoney Creek encouraging the flying-fox camp away from residential areas
- 2. a desirable understorey microclimate to reduce deaths in extreme heat events

#### Methods

The regenerating area (outlined in light green) will be fenced and weed removal will be ongoing. Small-area burns of dried wood piles are likely to be used to stimulate regeneration of soil-stored seed.

### Achievements of KFFR Bushcare Group

While they are a delight to watch, quietly eating or leaping at speed through the bush, swamp wallabies have made it increasingly difficult to get new trees growing. First the group built plastic mesh cages with wooden stakes, then we replaced these with larger diameter cages supported with reinforcing steel – a separate cage for each seedling tree or shrub.

Since 2011 the volunteers have built larger exclusion plots. (These are approximately marked on the map as dark green ovals.)

# Canopy Restoration Project - KFFR Cont. from previous page

The plots range in size from 6 x 4m up to 21 x 16m. We are pleased to report that these fences which exclude the wallabies are working well.

A diverse understorey of native herbs, grasses, creepers and shrubs is developing as well as natural regeneration of canopy tree seedlings – turpentines, coachwoods, blueberry ash and one blackbutt. This is very encouraging and shows the site has resilience – soil- and canopy-stored seed are still viable.

Dark green rectangles on the map mark where the Bushcare volunteers have begun planting coachwoods in exclosures. Ku-ring-gai Council's Community Nursery has grown coachwood seedlings for two years. These long-stemmed plants are placed in holes dug with an auger, as deep as possible to encourage root development along the stems. The objective is to increase the density of coachwood trees along the creek banks. Erosion has increased the undermining of banks in recent decades, a result of more hard surfaces in the catchment. This planting is experimental; effectiveness or otherwise will be reported in future newsletters.

## Farewell and thank you Ken!



Ken Holland has retired after 10 years with our Bushcare group. He even brought his grandson during school holidays. We are already missing his wit and determination. Thank you, Ken, for your contribution.



Ku-ring-gai Flying-fox Reserve Bushcare Group meets every Tuesday 8.30am - 12.30pm New volunteers always welcome! More information - email: web@sydneybats.org.au

## Friends of Bats

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## Bat Conservation Gift Fund News

Thank you to all our generous donors, whether anonymous or acknowledged below. Since December 2014, we have received donations 2014, from:

Y Cohen, H Gardner, V Insall, N Kent, S Payne, S Robertson, R Tanner, J Walker and Westpac Gift Matching.

Since 1 July, 2014 we have received donations totaling \$4975. Funds are put towards the habitat restoration project in Ku-ring-gai Flying-fox Reserve as well as maintaining our website and education program.

Visit our website: www.sydneybats.org.au or our Facebook page: <u>https://www.facebook.com/SydneyBats</u>

## Grey-headed flying-fox orphan release 2015

During February, 18 flying-fox pups graduated to the release cage in Gordon, followed by 17 more in March. This cage was commissioned in 2014 after Council decided the cage in KFFR should no longer be used.

Nearly all these pups were orphaned as a result of their mothers being electrocuted on powerlines.

Each year the pups leave their carers, are crèched together to "de-humanise" them before moving to the release cage where they spend several days before the hatch is opened in a 'soft release' where each bat can leave of its own accord. Supplementary feeding is also provided for a short period of time, once the hatch is opened.

A core group of 12 - 14 volunteers chops buckets of fruit each day for the orphans. Approximately 20 additional volunteers assist on an irregular basis. Their help is essential to the successful release of these bats and is much appreciated.

## Creature Feature: The Painted Bat



Photo: Merlin D. Tuttle 2012

Painted Bats (*Kerivoula picta*) are found in Asia: Brunei, China, India, Indonesia, Malaysia, Nepal, Sri Lanka, and Vietnam. A gorgeous bat, the common name is a result of the striking colours of orange and black on the wings and a woolly orange body. The species name (*picta* = small) reflects the size of the bat which is only 31-57mm (head and body) and weighing approximately 4.5g.

Belonging to the Vespertilionidae family, they are often found roosting in unusual places such as under birds nests or man-made structures. Not much is known about their biology as they are rare and poorly researched. Other than their unique coloration they are fairly normal bats which hunt insects at night using sonar.