

# Friends of Bats

## newsletter



Issue 112 March 2014

## Phase out of flying-fox shooting in New South Wales

Nancy Pallin

Unlike Queensland, the New South Wales Government has promised to phase out shooting of flying-foxes in commercial fruit crops. From 1 July 2014, licences will no longer be routinely issued to shoot flying-foxes except in 'special circumstances'.

The provisions of the 'special circumstances' were discussed at the meeting of the Flying-fox Consultative Committee in April 2013 and were explained at the Sydney Basin Orchard Field Day Fruit Growing Seminar at Richmond in June. There were no concerns raised about the definition of 'special circumstances' by any of the orchardists or conservation/welfare representatives present at the seminar.

The NSW Flying-fox Consultative Committee, comprising representatives from NSW Farmers Association, (NSWFA) Local Government Association (LGA), Nature Conservation Council of NSW (NCCNSW), Humane Society International (HSI), Batwatch, Office of Environment and Heritage (OEH) and Department of Primary Industry (DPI), agreed that fruit growers needed to have

the 'special circumstances' finalised and publicised well before the end of June 2014.

In February this year HSI, NCCNSW, NSWFA and Bat Watch jointly sent a letter to the Minister for Environment, The Honourable Robyn Parker MP, seeking finalisation of the 'special circumstances'. (One of the key components of the Government's commitment to phase out shooting in NSW was a \$5million netting subsidy fund. Unfortunately the uptake has been less than expected.) These organisations believe that finalisation of the 'special circumstances' will give orchardists the clarity needed to determine whether they will net their orchards. Grants to assist fruit growers to install full exclusion netting will be available to growers in the Sydney Basin and Central Coast until June 2016.

Other humane methods of crop protection include tunnel nets which are placed over trees after flowering, to ensure pollination, and are removed as the crop is harvested.

### You can help - write a letter now!

A personal letter from you to your NSW Member of Parliament would provide the encouragement needed for the Government to finalise and publicise the 'special circumstances': the next step towards the end of shooting of flying-foxes in NSW orchards.

Your brief letter needs to -

- express your strong desire for this cruel practice to end
- show approval for the government's provision of one-off grants for fruit growers to change to humane management practices
- request that you be advised of progress toward the end of shooting of flying-foxes

Please write in a polite, supportive and encouraging style. This approach from many individuals is likely to be the most effective. If you can encourage others to do the same it will be even more effective.

The current NSW Government official position can be found at:

<http://www.environment.nsw.gov.au/threatenedspecies/NettingOfCommercialFruitTrees.htm>

<http://www.environment.nsw.gov.au/animals/endtoshooting.htm>

<http://www.environment.nsw.gov.au/animals/flyingfoxesfaq.htm>

## Bat education events 2014

Long-time KBCS members will remember the days when one of our primary activities was "Bat Ed Talks", with a dedicated group of trained speakers taking live flying-foxes to schools, pre-schools, scout and other community groups to give members of the public a close encounter with these engaging animals. Times have changed - when our "ed bats" could no longer be housed at Lane Cove National Park we were fortunate to find them retirement housing Australia Walkabout Wildlife Park (AWWP), Calga. And our bat education program dwindled.

Anyone who has attended a bat talk/event knows how the close encounter with the live animal wows people. We are very lucky that two of our committee, Tim and Cary, are also working as rangers at AWWP and are prepared to do the kms/hours required to bring bats to events in Sydney. We owe them a huge debt of thanks.

So far this year we have jointly hosted events two events with Ku-ring-gai Council at 2nd Gordon Scout Hall (one with childrens' author Aleesah Darlison as our guest) and participated in an event at Parramatta Female Factory. Future events will follow.



Above: Suzy Tsaprounis, Ku-ring-gai Council, welcomes attendees in February. Below: Cary Kuiper and Ariel intrigue an interested group of onlookers at 2nd Gordon Scout Hall, before watching the evening fly-out.



## Netting - does it pass the finger test?

Nancy Pallin

Wildlife carers rescue all kinds of animals: birds, snakes, lizards, flying-foxes, possums, which get tangled in large mesh netting. Ku-ring-gai Bat Conservation Society strongly supports the new netting guidelines and encourages all its members to distribute the brochure **'Protect your garden fruit in a wildlife friendly way!'**

Any netting through which you can poke your finger is the wrong sort. There are now several kinds of netting on the market which are more densely woven and for home gardeners they are easier to install. The densely-woven net such as Hail Guard, Fruitsaver and Vege Net can be used without building a frame although doing so can keep the net away from the leaves and branches, avoiding damage to the net. With care the nets can be used every season for many years.

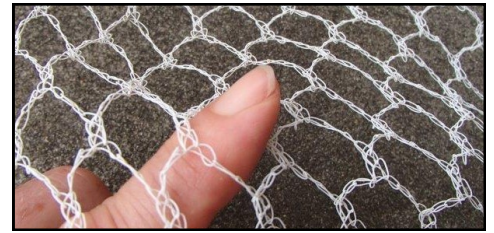
The brochure gives useful hints on how to protect individual fruit or the whole tree. It directs you to videos on the web showing how to erect the nets.

### What you can do:

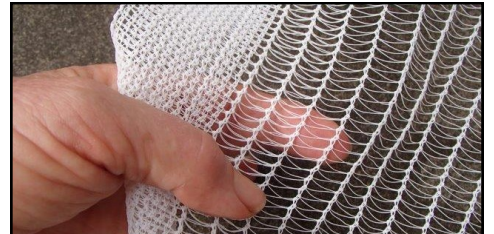
- Email KBCS for some brochures to give to family, friends and neighbours - [web@sydneybats.org.au](mailto:web@sydneybats.org.au).
- Ask your local hardware store to stock only netting which passes the finger test. Take them a brochure or write to them.
- Ensure proper disposal of unwanted netting so it does not become a hazard to wildlife like the drift nets in the ocean. Pass this message on too.

Together we must stop the cruelty of animals dying slowly from horrific injuries inflicted by being entangled in the wrong sort of netting.

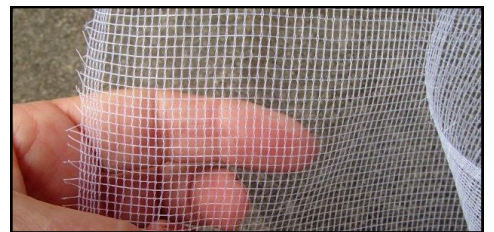
More information: <http://www.wildlifefriendlyfencing.com/WFF/Netting.html>



Above: This netting has large holes and is unsafe



The nettings shown above and below are suitable: small, densely-woven texture



## Feeling the heat: flying-foxes do it tough in QLD, Jan 2014

Summarised from *Bat rescue and Conservation Qld Inc newsletter Issue 24, 2014*

January 3 & 4 were extremely tough days for our flying-foxes as temperatures reached the 40's. Rescuers arrived at colonies in south-east Queensland (SEQ) to see thousands of flying-foxes already dead on the ground with many pups down with them waiting for their mums to wake up.

An estimated 50,000+ flying-foxes perished in south-east Queensland (SEQ) in the extreme heat event of Saturday, January 4 2014, when temperatures reached over 43°C.

On-the-ground reports indicate the majority of bat camps in SEQ were affected with some massive losses at inland sites such as Boonah, Palmwoods, Ipswich, Woodford and Mt Ommaney, while other colonies near the coast were spared.

Like humans, flying-foxes are unlikely to survive if their temperature exceeds 42°C. As the ambient temperature rises, flying-foxes start to fan themselves with their wings. They will seek shade, then use saliva on their bodies in an attempt to cool themselves. If water is easily available they will belly-dip both to cool

down and to drink the water from their fur. They will head closer to the ground seeking a cooler spot, but by the time they reach the ground it is usually too late. They will have suffered organ failure and will not survive long.

Thankfully, many of the pups were protected by their mothers and managed to survive when their parents did not. Our rescuers took in over 2000 orphans from this one single heat event and similar numbers were recorded from other bat care groups in SEQ.

Early in the morning of the 5th was also extremely distressing, with returning mothers screaming for their pups and pups crying out to mothers. We made the decision to try putting a few pups up for adoption, hoping a female would take one to replace her lost pup. Some of the healthy pups were rehydrated while mothers circled overhead watching our every move. They were placed in a tree to enable the distraught mothers to check them out. We were excited to find that all pups put up for adoption were claimed.

Spirits were boosted by the way volunteers, council workers and members

of the public assisted in making a distressing job that little bit easier. The extraordinary heat wave coming on top of human pressures means that official conservation measures such as the decade-old draft National Recovery Plan for Grey-headed Flying-foxes is now in tatters. We must continue to pressure the Federal Government to intervene urgently to ensure this keystone species remains. It is even more urgent now to stop the culling of these important animals and reverse the Queensland decision to put the management of flying-foxes in council hands.



Heat stress event victims - flying-fox bodies gathered at the base of a tree

Photo: Cary Kuiper



## Carnivorous plant feasts on bat dung

Summarised from an article published in *New Scientist*, 25 January 2011

A predator that can't hunt won't last very long. So when a carnivorous plant in Borneo was discovered to be bad at catching insects, biologists were puzzled. Just what does it eat to stay alive? The answer appears to be bat guano. The enigmatic plant makes a snug roost for tiny bats, which drop nutritious excrement into their host's digestive fluid.

Pitcher plants lure insects into their pitchers - leaf-like cups that are several centimetres deep - with scent, ultraviolet decorations, and tempting nectar. Ecologist Jonathan Moran found a particular species (*Nepenthes rafflesiana elongata*) in the 1980s that wasn't good at catching bugs. It had long, narrow pitchers that lacked scent and flashy patterns, and which captured seven times fewer insects than did those of the common variety.

In 2011, Ulmar Grafe of Universiti Brunei Darussalam published a short paper in *Biology Letters* after happening upon a Hardwicke's Woolly Bat *Kerivoula hardwickii* roosting in a *N. r. elongata* pitcher. Further investigation revealed that the bats roosted in more than

one-quarter of the *N. r. elongata* plants checked. Seventeen bats were radio-tracked to discover where they slept. For the several days that their transmitters lasted, those bats slept only in *N. r. elongata* pitchers and twice mother bats snuggled into the same pitcher with their young.

As pitcher plants go, *N. r. elongata* is especially well suited to the bats. There's room for a bat or two above the plant's digestive fluid. And the tubes are so slender that the mammals can wedge themselves in rather than struggle to grip the slippery walls.

Studies reveal that leaves adjacent to pitchers which housed bats had about 13% more of the essential nutrient nitrogen than did the leaves attached to batless pitchers. Indeed, the well-nourished leaves absorbed about one-third of their total nitrogen from bat guano, the researchers concluded after testing leaf blades for a rare nitrogen isotope that is most abundant in carnivores (and carnivore poo).

So far only bats caught in *N. r. elongata*

pitchers have been tracked so the importance of the pitchers to the whole bat population is as yet undetermined. Other pitcher plant species have been shown to rely on other mammals, such as tree shrews, for nutrients. With most of the 120-odd *Nepenthes* species hardly studied, it may be that this group of plants is not as carnivorous as originally thought.



A Hardwicke's Woolly Bat after its removal from the carnivorous pitcher plant.  
Photo: Holger F. Bohn

The full paper 'A novel resource-service mutualism between bats and pitcher plants' by Gaff *et al* 2011 can be found at:

<http://rsbl.royalsocietypublishing.org/content/7/3/436>

## Sutherland Council seeks a balance

Kareela flying-fox camp in Sutherland Shire (southern Sydney) may be protected in the future with Sutherland Shire Council

targeting the surrounding buildings and playgrounds. These may be retro-fitted with netting or similar to exclude bats and prevent bat/human interaction. If this occurs, credit must go to the Council for seeking alternatives to camp dispersal.

For more information visit the following article:

<http://www.theleader.com.au/story/2019597/flying-fox-safety-nets-may-reduce-hazard-risk/?cs=1255>

## Australia's hottest year – the human contribution

Summary of an article published in *The Conversation* 6 January 2014

Our climate is changing and recent extremes have occurred well outside the bounds of natural climate variations alone. 2013, Australia's hottest year on record, has seen massive numbers of flying-foxes suffering heat stress and death (see story page 2).

For the continent as a whole, we experienced our hottest day on record on 7 January, 2013. January 2013 was the hottest month on record, and the 2012-13 summer was the hottest recorded for the nation. Averaged across all of Australia, the temperature for 2013 was 1.2°C

above the 1961-90 average, and well above the previous record hot year, 2005, of 1.03°C above average.

Researchers at The University of Melbourne – Sophie Lewis (Post-doctoral Research Fellow) and David Karoly (Professor of Atmospheric Science) - have looked at the role human-caused climate change played in recent temperature extremes across Australia.

In their analysis they separated natural influences (solar radiation changes and volcanic factors) from human influences

(greenhouse gas changes, aerosols and ozone) on climate to see how much the risk of extreme temperature increases thanks to human influences.

They found that for 2013 extremes, human influences increased the odds of setting this new record by at least 100 times. Natural variability always plays a major role in the occurrence of weather and climate extremes. But in the case of our recent hottest year on record, human-caused global warming made a crucial contribution to our extreme temperatures.

For the full article visit: <http://theconversation.com/australias-hottest-year-was-no-freak-event-humans-caused-it-21734>

## Flying-fox counts - KFFR

Four fly-out counts of flying-foxes from Ku-ring-gai Flying-fox Reserve have been undertaken since our last newsletter.

- 12 December, 2013 - estimate 14,831
- 15 January, 2014 - approx 29,000
- 20 February, 2014 - estimate 21,015
- 19 March, 2014 - estimate 35,750

The last couple of months have seen flying-foxes feasting on the flowers of tree species such as Rough-barked Apple, (*Angophora floribunda*) and Swamp Mahogany (*Eucalyptus robusta*).

## Vale Ron Yeates

8.9.1928 - 23.1.2014

Mayor of Ku-ring-gai

September 1984 – September 1987

Ron Yeates was instrumental in protecting the camp of grey-headed flying-foxes in Gordon from development. The land, for which a development application had been submitted, was jointly purchased by the NSW Government and Ku-ring-gai Council on the advice of the NSW Heritage Council.

Ron called a meeting of community group representatives and individuals who had spoken up for the flying-foxes during the vehement arguments about bats in Council meetings and in the North Shore Times. This meeting led to the formation of what is now Ku-ring-gai Bat Conservation Society Inc.

KBCS and the flying-foxes owe Ron a debt of gratitude for taking action to protect flying-fox habitat at a time when few appreciated the importance of flying-foxes.

## The invasion - a bat's story

By Little Red, Wild River, Herberton (a temporary visitor),  
as told to Northern Herald. Atherton Tablelands, QLD

It was 1880 when they first arrived. They settled close to our camp. The old timers said they'd never before stayed here for long or been in such numbers. It must have been their scouts' discovery of resources they wanted that brought them to our idyllic valley home. And they came in their thousands. We locals considered them very ugly. They looked so weird. Ghostly pale hairless bodies so awkward of movement with their long gangly limbs, unwebbed and unable to fly. What awful creatures!

The odd way they moved restlessly around and upside down by day, instead of hanging dozily like us - and then huddled together in groups enclosed all night during foraging time. Do they never see the magic of the moonlit forest from above? The smell of their cooking fires was nauseating in the sweet mountain air. Did they really eat meat?

And the incessant noise! Chattering, shouting, banging, chopping and sawing and load explosions that shattered our once peaceful sleep time. How horrible they were! Their waste products piled up, spilling into the clear waterways and turning them murky. Our drinking water was fouled by mud and debris.

Then began the stealing of our food. The blossom-bearing trees were systematically smashed and broken. Large areas of forest were denuded. And still they stayed on. It was rumoured that they carried disease, as many of them had died. Some of our own had fallen from their

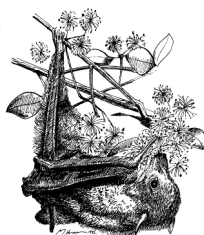


Little red flying-foxes Photo: Vivien Jones

roosts - wounded or dead when long sticks were pointed at them and loudly cracked. There were even reports of our poor victims being eaten. They certainly were a danger to our community.

In fear and consternation our camp leaders pondered on what to do. Should they be moved on - destroyed perhaps? But how? We loathed them being around us but they wouldn't go. And so we compromised. Our camp left the area for them to continue their destructive practices. But this year our elders decided to revisit the old camping ground of distant memory. Once more a bumper season of sweet nectar blossom was dotting the hills in a creamy patchwork. And do you know what happened?

Although we did them no harm, they considered us to be invading their space and not belonging there! How fair is that? Maybe when the flowering has finished we'll again move to more tolerant places - but then again, we rather like being here too. So please - give us a break!



M Herron

## Bat Conservation Gift Fund News

Thank you to all our generous donors, whether anonymous or acknowledged below. Donations received from January to March 2014 total: \$1140.00. Received from: M Kerr, E Oakley, Westpac Gift Matching.

## Friends of Bats

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PO Box 607, Gordon, NSW, 2072 Australia.

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

Email: [web@sydneybats.org.au](mailto:web@sydneybats.org.au)

Chairperson: Nancy Pallin (02) 9416 7334

Subscription enquiries: Penny Diakiw (02) 9449-3539

Newsletter editor: Jen O'Meara