

Friends of Bats

newsletter



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Government accelerates demise of flying foxes

Nick Edards

For Julia Gillard's party, Luke Hartsuyker's EPBC (Health and Safety) Amendment Bill 2010 is an embarrassment. For the grey-headed flying-fox, it's just another step on a gradual but accelerating journey towards what some ecologists consider to be inevitable extinction. If the species is a barometer for the effectiveness of environmental legislation, and the will of state and federal governments to make bold decisions to protect Australia's biodiversity, then it's fair to say that many of our iconic species are, quite simply, doomed.

In 2001, the grey-headed flying-fox was listed as vulnerable under the Commonwealth EPBC Act. Listing is meant to provide sufficient protection to the listed species that the decline in population can be arrested and, hopefully, reversed. But it hasn't really worked out like that for the grey-headed flying-fox.

A recovery plan, detailing the measures necessary to affect a recovery of the species, is supposed to be adopted within six years of the species being listed. That deadline passed four years

ago and yet we still have no recovery plan in place (or even a draft).

The federal government allows grey-headed flying-foxes to be shot as a method of crop protection. Even the most sceptical anti-environmentalist would have to agree that shooting a threatened species is unlikely to be the best way to aid its recovery.

Currently, only NSW issues licenses to shoot flying-foxes. Queensland banned the practice in 2009 as it was proven to be cruel and inhumane. Despite calls by both farmers and environmentalists for the NSW Government to provide support for netting, which negates the need for shooting, to be installed at farms at risk from flying-foxes, Premier Keneally and Environment Minister Sartor have kept their heads down and allowed the shooting, and the decline of the grey-headed flying-fox, to continue unabated. It is cause for celebration that both NSW Labour and NSW Liberal parties have, in the lead

Nick Edards photographed this grey headed flying fox as it was just starting to climb, having belly dipped in the Parramatta River. The soaking will help to cool it down. As the bat flies away, it will lick water from its stomach fur to aid rehydration in the very hot (40C+) conditions.

Politicians pledge to put and end to shooting of flying-foxes

Shadow Minister for Climate Change and Environmental Sustainability Catherine Cusack announced on 6th March that a NSW Liberals & Nationals Government will provide up to \$5 million for netting smaller farms in the Sydney basin to protect crops from flying foxes.

"Our commitment will eliminate the need to issue licenses to destroy flying foxes. "The loss of the species would cause huge and irreversible damage to our ecosystem."

"We know that farmers need to protect their orchards and that flying foxes must be protected – the two are not mutually exclusive.

"A NSW Liberals & Nationals Government would settle this high profile, emotional and long-running dispute between farmers and conservationists by providing up to \$5 million for subsidies to enable netting of crops on smaller farms in the Sydney basin."

"We have received hundreds of representations from both sides of the issue and trust today's news is a relief for all stakeholders."

Ku-ring-gai Bat Conservation Society is relieved that at last there is a strong commitment to end the disgraceful history of killing flying-foxes to protect crops in NSW. We commend Barry O'Farrell and Catherine Cusack for negotiating this important commitment and look forward to its implementation. We trust that all Members of NSW Government will support this solution to protect the threatened grey-headed flying-fox and assist farmers.

Note: The Labour party has issued a similar pledge.

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up to the March 26th state election, committed to provide funding for farmers in the Sydney/Central Coast areas to net their orchards. The elected party will be under significant pressure by conservation and farming groups to deliver on this promise and bring an end to the needless slaughter.

It's not just politicians who are assisting the grey-headed flying-fox on its way to oblivion. Extreme climatic events play their part effectively too. Just recently at least 1,300 grey-headed flying-foxes died in the Wingham Brush colony near Taree as a consequence of the prolonged heat and low humidity, conditions which caused fatal heat stress in a large proportion of this year's juvenile animals. Some 3,000 died under the same circumstances in the Yarra Bend colony in Melbourne last year.

It's now widely accepted that the flying-foxes' natural food sources have been badly compromised by excessive rainfall in the last two years. Flying-foxes are nectar- and blossom-eaters but when the rain is heavy, the nectar gets washed away and the bats have to find alternate food sources or they starve (or look to orchards as an alternate food source and risk being shot). Many wildlife rescue groups report that the condition of animals coming into their care in the last year has been exceptionally poor with many animals 20% below minimum healthy weight.

Habitat loss has forced many flying-foxes to seek shelter in urban

environments as these often provide access to more reliable, year-round food sources than could be found in rural environments. This adaptation to urban environments brings the flying-foxes into conflict with people and peaceful co-existence is the exception rather than the rule. Sydney's Royal Botanic Gardens is the most well known instance of "not in my backyard" sentiment towards flying-foxes. In May 2009, then Federal Environment Minister Garrett approved a proposal to disperse the flying-foxes from the Gardens. The approval was challenged in the Federal Court on the grounds that the Minister failed to consider matters that he was obliged to consider. The challenge was dismissed and it is likely that the eviction will commence in May. The dispersal represents another government-sanctioned action which seems at odds with the obligation to protect and recover the species. In fact more than being an action sanctioned by government, it was an action proposed by a government agency. Botanic Gardens Trust is part of the NSW Department of Environment, Climate Change and Water (DECCW), the very department that administers threatened species legislation in NSW.

Which brings us to Luke Hartsuyker's bill. The colony of flying-foxes in Maclean has been a source of conflict for many years. Mr Hartsuyker's Bill seeks to add an amendment to

the EPBC Act to exclude the Commonwealth from any decisions relating to the dispersal of flying-foxes from the Maclean area. The reality is that the majority of politicians who voted in favour of the Bill were probably more interested in embarrassing Gillard than they were in supporting Hartsuyker. As a result, one of the most significant pieces of Commonwealth environmental legislation has been undermined for cheap political point-scoring. If the Bill passes the Upper House and the Commonwealth is excluded from the decision-making process. It will be left to NSW DECCW (the department that both applied for and approved the dispersal of flying-foxes from Royal Botanic Gardens, Sydney) to determine whether a dispersal at Maclean can proceed. The state legislation is far weaker than the Commonwealth EPBC Act and approval by NSW DECCW of a dispersal of flying-foxes from Maclean is almost a given.

Looking forward, we can almost certainly see both federal and state politicians making a real and tangible contribution to the decline and inevitable loss of the grey-headed flying-fox.

You don't have to care about flying-foxes to be worried by this trend. If our governments have an inclination to write-off one species, it would be foolish to think that they wouldn't be inclined to do the same for any other species.

Myrtle Rust Alert

Myrtle Rust (*Uredo rangelii*) is a serious pathogen. It produces masses of powdery bright yellow or orange-yellow spores on infected plant parts. Sometimes these infected spots are surrounded by a purple ring. Older lesions may contain dark brown spores.

Everyone is asked to learn to identify Myrtle Rust, be on the lookout for it and report any sightings the Exotic Plant Pest Hotline 1800 084 881.

Myrtle Rust affects plants of the Myrtaceae family (which includes Turpentine, Angophoras and Eucalypts, as well as Callistemon, Kunzea, Leptospermum and Melaleuca). It can easily be spread in infected plant material including cut flowers and nursery stock, on clothing and dirty equipment including containers and pruning shears, and on contaminated timber products.

The Department of Primary Industries website has detailed information on host plants and the precautions we can all take to prevent its spread, as well as many more images. See link below .



Myrtle Rust affects plants of the Myrtaceae family (which includes Turpentine, Angophoras and Eucalypts, as well as Callistemon, Kunzea, Leptospermum and Melaleuca)

Visit www.dpi.nsw.gov.au/biosecurity/plant/myrtle-rust/hygiene

Private Native Forestry



This portable sawmill was operating on forested private land in the catchment of the Macdonald River, north of the Hawkesbury River in 2006. The largest eucalypts were being converted to timber, leaving only very young trees. The species being cut down were blue gums, blackbutts and stringybarks, leaving angophoras. How many years will it take to grow trees of this size?

Like many other activities on private land, private native forestry

operations require development consent. It requires a Property Vegetation Plan (PVP), a registered plan, on the title, that sets out what areas can be cleared, which areas will be managed and the various conditions attached. The PVP must be approved by the Catchment Management Authority before any forestry operations commence. The NSW Department of Environment Climate Change and Water provides Codes of Practice

advising how forestry operations are to be conducted. Information is also provided on threatened species, protection of hollow bearing trees and nectar trees. Do landowners follow this advice?

Nature Conservation Council member groups expressed concern about the cumulative impacts of this industry on the biodiversity of forests in NSW and the danger that it is contributing to green house gas emissions and therefore global warming.

Nancy Pallin



A Guide to Private Conservation in NSW

Nature Conservation Council NSW has copies for members of the publication 'A Guide to Private Conservation in NSW' produced by the Environmental Defenders Office in February 2010.

If you want printed copies, email hcreenaune@nccnsw.org.au with your mailing address and the number of copies you would like.

The publication aims to help the public understand the different private conservation options available and help people decide which option would be most suitable for their property and circumstances.

You can also download digital copies directly from the EDO website (see link below).

To download digital copies of 'A Guide to Private Conservation in NSW' go to: www.edo.org.au/edonsw/site/pdf/pubs/I00503private_conservation.pdf
To explore this subject visit these websites: www.edo.org.au/edonsw/compliance/landclearing.html www.environment.nsw.gov.au/pnf/
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Borneo bats roost in carnivorous pitcher plants

Ella Davies

Bats in Borneo have been found roosting in carnivorous pitcher plants. A new study reveals that the plants benefit from nutrients in the bats' droppings.

This unusual living arrangement is apparently beneficial for the bats too as they can shelter unseen inside the plants' pitchers.

Although tree shrews have also been observed using pitcher plants as toilets, this is the first time mammals have been found living inside them.

Nepenthes, carnivorous pitcher plants, grow in nutrient-poor soil and rely on trapping insects to acquire enough nitrogen for growth.

Found in the peat swamps and heath forest of Borneo, *N. rafflesiana elongata* are remarkable for their long aerial pitchers. Research has previously suggested that *N. r. elongata* catch up to seven times less insects than other pitcher plants in Borneo.

In a new study, published in the journal *Biology Letters*, scientists found that the unique subspecies had an extraordinary relationship with mammals.

Dr Ulmar Grafe and his team investigated how the plants supplemented their nitrogen intake and were surprised to find woolly bats inside the pitchers.

"It was totally unexpected to find bats roosting in the pitchers consistently," says Dr Grafe.

The small Hardwicke's woolly bats (*Kerivoula hardwickii*) were found roosting above the digestive fluids in the plants' pitchers.

Rather than consuming the whole bat for extra nitrogen, Dr Grafe found that the plants gained from the bats' waste.

"The pitcher plant benefits from attracting the bat because the bats defecate into the pitcher, using it as a toilet if you will," he explains.

From http://news.bbc.co.uk/earth/hi/earth_news/newsid_9372000/9372874.stm

This unusual arrangement also has advantages for the bat according to Dr Grafe.

"The bat benefits from having a secure roosting place that is also free of blood-sucking ectoparasites that often accumulate in bat roosts," he tells the BBC.

Last year, researchers observed tree shrews using another type of pitcher plant (*Nepenthes rajah*) as a toilet and likewise found that the plant benefited from nitrogen in the deposits.

However, this is the first time mammals have been found living inside carnivorous plants.

Dr Grafe points to these findings as evidence that biodiversity is key to protecting the planet's wildlife.

"This is one of many animal-plant mutualisms... that highlights the fact that extinction or removal of a single species within an ecosystem will impact many other species."



The darker shadow in this pitcher plant is a roosting bat.



"The pitcher plant benefits from attracting the bat because the bats defecate into the pitcher, using it as a toilet." Dr Grafe

Grey-headed flying-foxes need safely-netted fruit trees

Marina Tretiach - Sydney Metropolitan Wildlife Services (SMWS) volunteer

Around this time every year when the fruit on backyard fruit trees (particularly figs) is ripening, large numbers of flying-foxes become victims if poorly netted backyard fruit trees.

This primarily occurs when netting is loosely thrown over the fruit trees. Correct netting of fruit trees will minimise damage to native animals and birds.

This involves construction of a frame large enough to surround (but not touch) the tree. A white, knitted net (or shade cloth) can be pulled taut so that animals, such as the flying fox, will simply bounce off it and not become entangled.

Injuries caused by entanglement in netting include mouth damage (where the bat has attempted to chew its way out) rope burns and constriction injuries.

- If you see a bat entangled in fruit tree netting, do not touch.
- It is especially important not to do more damage to the animal by attempting to free it from netting.
- If possible cover the animal with a towel and keep your pets locked away.
- Call your local Wildlife Organisation. In Sydney:
 Sydney Metropolitan Wildlife Service
 ph. 9413 4300 or
 WIRES ph. 8977 3333

This season has been the worst ever for net-caught bats, particularly because of the influx of thousands of bat 'refugees' from tumultuous weather and poor feeding

opportunities up north. In January alone wildlife organisations in Sydney received 404 calls to rescue flying-foxes entangled in netting. Many incidents would not have been reported and in some cases animals would have been beaten to death.

Fruit bat rescuers and carers are presently overstretched with the number of bats coming into care.

Animals that would normally be given a second chance to be fed and heal their wounds in a rehabilitation facility, are frequently being euthanased if they are assessed to be too difficult to treat, or too long in care.

It is particularly distressing for a bat to be caught out alone in the daytime where it could be predated on by dogs, cats and even birds, who recognize that the bat is alone and helpless.



This flying fox has been cut out of netting but is still entangled and will not be able to fly free. It is best to leave the rescue to a vaccinated wildlife carer who will be able to remove all of the netting safely and assess the degree of injury to the bat's wings and body.

Photo: Holly Manwaring (SMWS volunteer, Bat Rescuer and Batphone Operator)

Community award for Nancy Pallin

On 27th January 2011, as part of their golden anniversary celebrations, North Shore Times awarded fifty outstanding people a community medal. This medal was to acknowledge their contributions to the community. Nancy received her award for her services to conservation and environment. Congratulations Nancy!

In Memory of Julie Spence

Julie was a very active member of Ku-ring-gai Bat Colony Committee between 1989 and 1992. She passed away in January. She is remembered for her expert care of animals, especially bats and her warm personality.

Hannah, a rehabilitated grey-headed flying-fox, now 21 years old, was trained by Julie for education talks. Many children and adults learned about bats from Julie and Hannah.

Julie's organisational skills were put to good use in coordinating rescues of flying-foxes across Sydney. She helped set up the system where

each animal was given a call number and tracked through to release. Although she lived at Blacktown she coordinated the release of rehabilitated flying-foxes at Gordon, obtained fruit supplies, conducted night watches of flying-foxes and presented thorough reports to the Committee.

Julie pioneered the care of microbats sought assistance from scientists in identifying them. She mapped the sites across Sydney where microbats were rescued providing an insight into the distribution of several species. She provided information on threats

from cat predation, destruction of roosts when trees were removed. At Friends of Bats nights at Gordon Julie, with her patient manner, explained many times, aspects of their lifestyles to adults and children who were fascinated by these tiny creatures. She arranged for photographs to be taken of these microbats for showing at educational talks. Julie went on to work with Fairfield City Council to protect and regenerate habitat for flying-foxes at the camp on Cabramatta Creek.

Julie Spence was a multi-talented contributor to the welfare and understanding of bats.

We remember her with affection.

Friends of Bats

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Bat Conservation Gift Fund News

Donations totalling \$480.00 received from J Jenkins, S O'Grady, J Pollock, J Southgate, N Sutherland, M Wood. Total for the year \$3789.

Thank you all for your generosity! Donations over \$2 are tax deductible - receipts are mailed with the next newsletter unless otherwise requested.