

Friends of Bats

newsletter

Issue 119 March 2016



New South Wales review of environmental laws

Jen O'Meara

In June 2014, the NSW Minister for the Environment appointed an independent Biodiversity Legislation Review Panel to conduct a comprehensive review of the *Native Vegetation Act 2003*, *Threatened Species Conservation Act 1995*, *Nature Conservation Trust Act 2001* and those parts of the *National Parks and Wildlife Act 1974* which relate to native plants and animals and private land conservation.

Based on this review, the Government is now drafting changes to the legislative and policy framework for biodiversity conservation and native vegetation management in New South Wales. While there is a risk in this current political climate that the laws will be vastly weakened as a result of the review, it is also an opportunity to address why these laws have not been successful to date.

The Environmental Defenders Office believes this is in part due to under-resourcing of biodiversity-specific legislation (the *Threatened Species Conservation Act 1995* and *Native Vegetation Act 2003*) and contradictory application of laws such as the *Environmental Planning and Assessment Act 1979* which has resulted in the prioritisation of social and economic interests and the exclusion of public participation.

Conflicting legislative objectives have prevented positive biodiversity outcomes for many years and continue to do so. This is illustrated by recent changes to urban tree-clearing rules under the guise of bushfire protection or the fact that the Grey-headed flying-fox can be shot under licence whilst listed as a threatened species under the *Threatened Species Conservation Act 1995*; and that land

subject to a conservation agreement may still be mined.

Ku-ring-gai Bat Conservation Society (KBCS) is concerned that all bat species will be adversely affected by any weakening of biodiversity laws and has submitted responses to the initial review process. With many species already recognised as threatened, further loss of habitat due to the allowing of increased land clearing for urban development or agriculture will not ensure their future or the future of the ecosystems with which they interact.

KBCS believes that biodiversity laws should be strengthened to support a positive vision for long-term environmental stewardship in NSW, consistent with the principles of ecologically sustainable development to address the current biodiversity crisis in NSW.

Ways you can help to protect bats and their habitats

- Express your opinion by contacting your local member of parliament or state Minister for the Environment, Mark Speakman: cronulla@parliament.nsw.gov.au
- Keep up to date and have your say at <http://www.environment.nsw.gov.au/biodiversitylegislation/haveyoursay.htm>

Hats off to Eurobodalla Council

Jen O'Meara

On 8 December 2015, Eurobodalla Council adopted the innovative Water Gardens Grey-headed Flying-fox Camp Management Plan and approved funding to implement some of its recommendations. Unlike other councils who are moving straight to disturbance and dispersal of roosts, Eurobodalla Council is currently focussed on reducing the impacts of the camp on surrounding residents, not on the residents of the camp.

Eurobodalla Council will maintain the buffer zones created last year where some vegetation was pruned and removed between the dwellings at Water Gardens. Residents living within 250 metres of Water Gardens Reserve received a letter offering them practical help—free rental of a high pressure cleaner to clean faecal drop from their outdoor furniture and patios.

Residents could also be eligible for a free car cover, clothesline cover, and the removal of cocos palms, which attract the flying-foxes, from their yards. It is very encouraging to hear of a Council which supports sustainable living with bats.

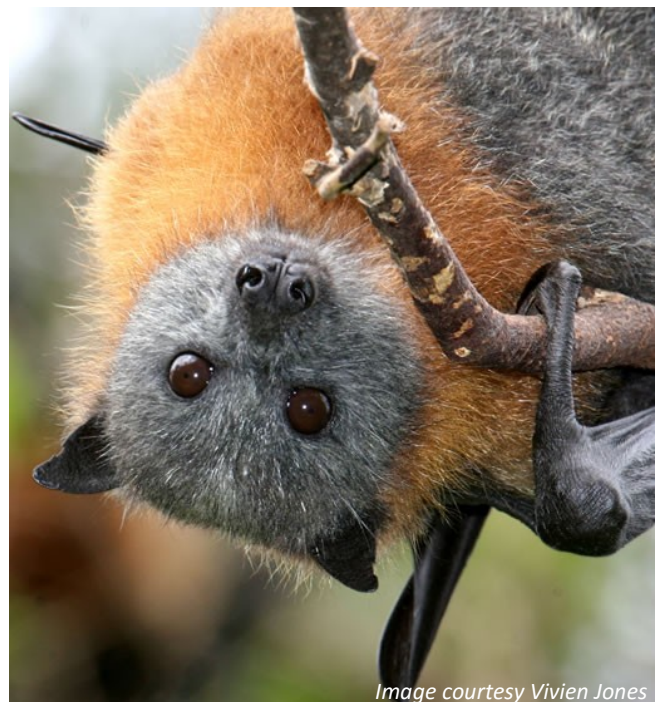


Image courtesy Vivien Jones

Mortality survey shows leading causes of bat deaths

Original post: Joshua Rapp Learn 21 January, 2016 at <http://wildlife.org/mortality-survey-shows-leading-causes-of-bat-deaths/>

White-nose syndrome (WNS) and wind turbines have killed the largest number of bats in the world since 2000, according to a new study.

"Many of the 1,300 species of bats on Earth are already considered threatened or declining. Bats require high survival [rates] to ensure stable or growing populations," said Tom O'Shea, USGS (US Geological Survey) emeritus research scientist and the lead author of the study published in *Mammal Review* in a release. "The new trends in reported human-related mortality may not be sustainable."

Co-author Raina Plowright, an assistant professor at Montana State University, said they looked through literature dating back to 1790, recording any time in which more than 10 bats died at the same place within a year's time as a mass mortality event. They compiled nearly 1,200 of these events from around the world and found that prior to 2000, most bats were

intentionally killed by humans.

Many of the deadly actions were due to dangers people perceived. On the island of Mauritius in the Indian Ocean, for example, inhabitants kill fruit bats to stop them from eating local fruit crops (see page 3). In South America, ranchers sometimes cull vampire bats because they believe the animals pass rabies along to cattle.

But after the turn of the millennium, wind turbines and WNS became the leading causes of death.

The cover feature story in the spring 2015 issue of *The Wildlife Professional* examined the effect of wind energy on bats, among other things. Paul Cryan, a research biologist with USGS and also part of the recent *Mammal Review* study, said in early 2015 that research showed the hoary bat (*Lasiurus cinereus*) accounted for 40 percent of all wind turbine-caused bat deaths in the United States and Canada. He believes that the bats might be confusing the turbines with trees where they roost, hunt insects and socialize with other bats.

WNS has so far predominantly affected bats in North America, wiping out entire populations of the small creatures in the east, but still accounts for one of the leading causes of mass bat mortality globally. Wildlife managers released the first successfully treated bats for the fungal pathogen in Missouri last May, but Plowright worries that even if researchers find a way to stop the spread of the disease, bats will still face trouble.

She said that unlike other small mammals, bats live for many years and are slow breeders, with many species only giving birth once a year.

"They are not evolved to respond really quickly to a mass mortality event," she said. "It's quite a worry to see these mortalities in bat populations because they won't be able to recover these numbers."



Little brown bats in a New York hibernation cave. Note that most of the bats exhibit fungal growth on their muzzles. ©Nancy Heaslip, New York Department of Environmental Conservation

Ku-ring-gai Flying-fox Reserve counts - update

Tim Pearson

The January 2016 count for Ku-ring-gai Flying Fox Reserve camp showed there were approximately 22,350 animals flying out. Of course, at this time of year, there would be numbers of juveniles still remaining in the camp at fly-out.

This number is still low for January, continuing the trend of reducing numbers in the Gordon camp (and incidentally, in most Sydney urban camps). Examining the last 20 years of population data by month: (see Figure 1) we can see that 22,350 is by no means the lowest number for January, but it's well below the average.

When comparing the last 20 years of averages, you can see that in many cases the monthly totals were the lowest recorded. In addition, I don't think we've ever had so much fluctuation in the camp over a year. Note that July was an aberration - briefly, we had above average numbers in the camp due to a flowering event in the city.

Mapping the data over the 20 years, there's a clear trend, although it's not strong ($P < 0.001$, $R^2 = 11.5\%$).

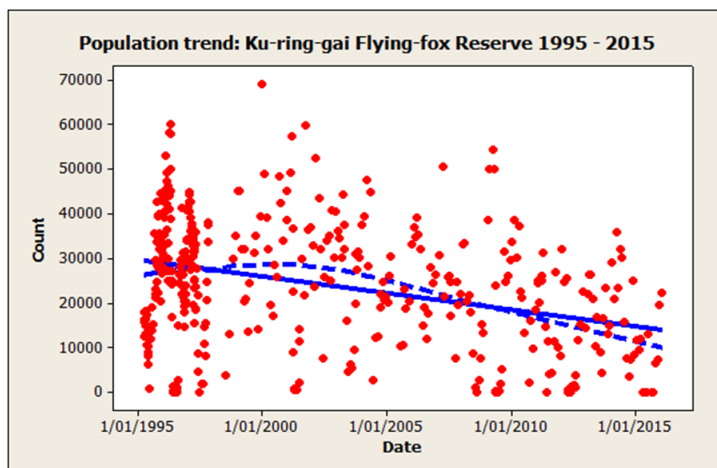


Figure 1 Population trends for Ku-ring-gai Flying-fox Reserve 1995-2015

Mauritius bat cull update: death toll exceeds 20,000

Published on December 14, 2015 by Zahirah Abdooraman, Bat Conservation International. This article appeared at:

<http://www.batcon.org/resources/media-education/news-room/gen-news/80-latest-news/957-mauritius-bat-cull-update-death-toll-exceeds-20-000>

Vikash Tatayah, Conservation Director for the Mauritian Wildlife Foundation, has confirmed that the official government endorsed cull of the threatened Mauritian flying fox (*Pteropus niger*) is officially over, at least for this year. While the official cull has ended, thousands more are thought to have been illegally killed – and the illegal killing continues. While we will never know the true number of bats killed, experts state there is no doubt that the government's target to kill 20,000 threatened Mauritian flying foxes was exceeded. Vikash is very concerned that the bats are in dire straits as the cyclone season has begun.

The government approved the cull in hope that fewer bats would help reduce damage to fruit like mangoes and lychees. Prior to the cull, conservation leaders in Mauritius and around the world took a stand and voiced serious concerns over the decision by the Mauritian government to conduct the cull, especially as it was based on questionable science that was contradicted by new research and extensive expert opinion.

Bat Conservation International (BCI) joined with the Mauritian Wildlife Foundation, the International Union for the Conservation of Nature (IUCN*) Species Survival Commission and many others in asking the government to reconsider their decision. Thousands of BCI members and other dedicated conservationists from Mauritius and around the world voiced their concerns. The IUCN even sent a delegation to discuss with the government and halt the impending cull (which failed to end the cull).

Sadly, our combined voices, logic, science, and recommendations were not heeded.

Constructive and viable solutions are needed in Mauritius. Negotiations and plans to mitigate the damage from the current cull and to ensure it does not happen in the future are underway. An island-wide survey is needed to confirm

the number of survivors. With the support of BCI and others, the Mauritian Wildlife Foundation is undertaking an education

“This decision sets a dangerous precedent - it could be one of the first times that culling of a globally threatened species has been authorized against all the scientific evidence and when there are more effective alternatives available.”
Dr Simon Stuart, Chair of the IUCN Species Survival Commission.*

and awareness campaign to counter the misinformation that has been spread. This will be kicked off with an education officer being placed on the ground in January 2016. Further, MWF is drafting a motion to the IUCN to prevent this from happening again, anywhere in the world. BCI has agreed to be a co-sponsor of the motion which will be presented at the 2016 World Conservation Congress.

Unfortunately, the threats to bats continue to grow and we expect the number of globally endangered bats to grow as well. There are over 1,330 species of bats and the IUCN Red List of Threatened Species currently have identified 78 species as Endangered or Critically Endangered. An assessment of these bats is underway and we expect the number of Endangered or Critically Endangered bats to increase in the coming years. Under BCI's board approved strategic plan, we have launched a global initiative to pro-actively work to prevent the extinction of bats. The needs are great and BCI recognizes that we will not be able to be engaged on all endangered

species initiatives and we ask the world to make proactive conservation of bats, especially globally endangered bats, a top priority.

The 2009 extinction of the Christmas Island pipistrelle (*Pipistrellus murrayiserves*) [serves] as a tragic reminder to BCI and the rest of the world that bat extinctions are not simply a remote possibility, but a cruel reality of what happens when warning signs are disregarded, reactions are slow, and the foundation for sustainable conservation was not established.

We live in a time of unrest and uncertainty with human population growth and the increasing impacts on our environment from climate change and the increasing rate of loss of native habitats. Scarce resources all too often results in greater conflict between people and wildlife. Effective conservation demands that we work with people to hear and



Mauritian Flying-fox

Photo: Jacques de Speville/WWF International

understand their concerns and develop viable solutions. If we fail to take into account the needs of people, we risk further crises like we are seeing in Mauritius.

* IUCN: [International Union for Conservation of Nature](http://www.iucn.org)

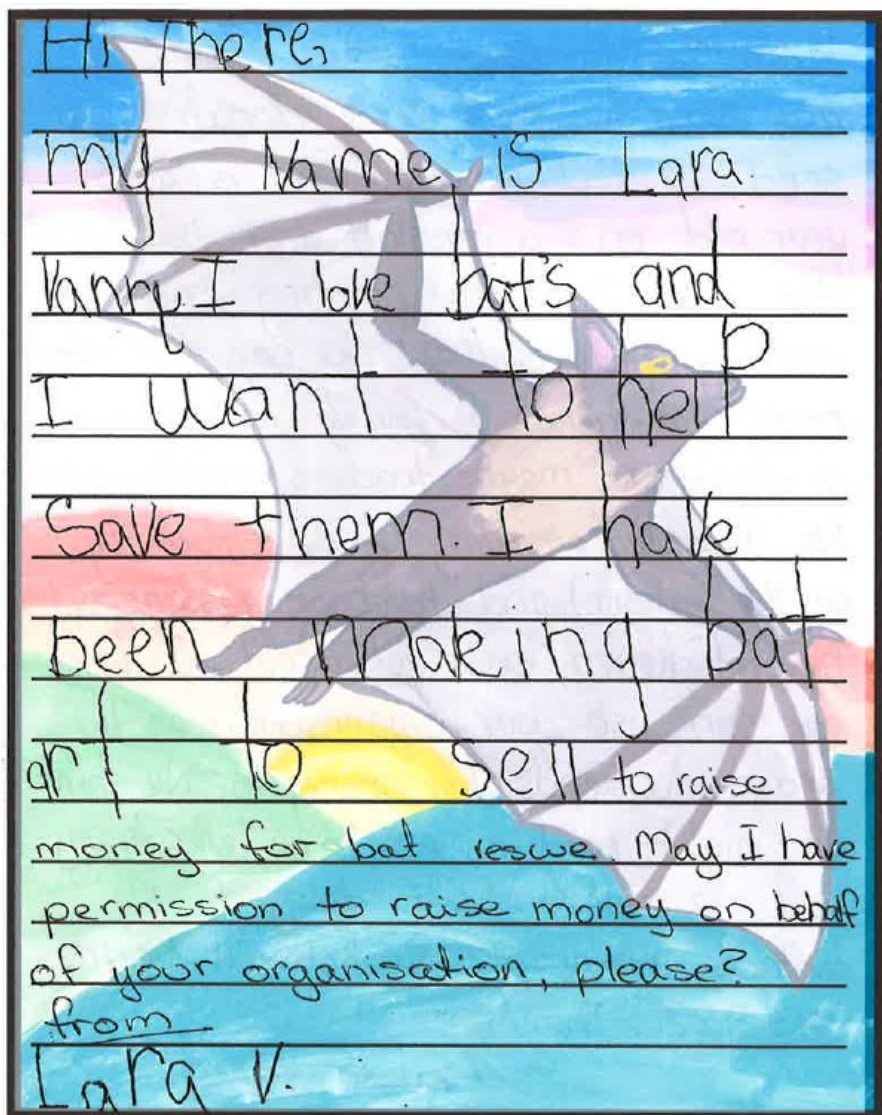
Ku-ring-gai Flying-fox Reserve Bushcare Group

meets every Tuesday 8.30am - 12.30pm

New volunteers always welcome! For more information email web@sydneybats.org.au

Bat Art!

Last year we received this gorgeous request from Lara who wants to help save bats. As we aren't involved in bat rescue we felt her efforts would be better directed to a group helping injured/orphaned bats and suggested she contact [Tolga Bat Hospital](http://www.tolga-bat-hospital.com.au) in northern Queensland. We really hope she has been successful in raising some money for them. As you can see, she is a talented artist and if you are interested in helping her raise funds to save bats, let us know (web@sydneybats.org.au) and we can put you in touch.



Bat Conservation Gift Fund News

Thank you to all our generous donors, whether anonymous or acknowledged below.

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The economic cost of preventing Hendra Virus

Abstract from S. J. Wilson and M. P. Ward (2015)

Intangible and economic impacts of Hendra Virus prevention strategies, *Zoonoses and Public Health*.

Hendra virus is a potentially fatal disease spread by flying-foxes, always infecting humans via a spill-over event from equine Hendra infection.

In a recent paper by S J Wilson and M P Ward of the University of Sydney, the impacts of two different Hendra prevention strategies were compared – vaccination and flying-fox roost removal – using a framework that considered different

stakeholder groups' perspectives. The study found that for all stakeholder groups, the option to vaccinate horses was found to have the highest value economic result while the option for roost removal was a more costly strategy.

The results of this theoretical study suggests that to support a two-dose initial vaccination protocol for complete protection for horses is the best option rather than roost removal.



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