

The Maclean Flying-fox Story

20th December 2010

As part of a filming project to produce a documentary on Flying-foxes, the Clarence Environment Centre's team spent a morning filming at the Maclean High School in northern NSW and familiarising ourselves with the issues that have divided the community in recent years.



Threatened Grey-headed Flying-foxes roosting at the Maclean substation gully

Grey-headed Flying-foxes are a threatened species listed under both the NSW Threatened Species Conservation Act and the Federal Environmental Protection and Biodiversity Conservation Acts, and are known to have utilised the rainforest habitat adjacent to the Clarence River at Maclean since white settlers first arrived in the 1830s and proceeded to clear the land.

Today it is estimated that some 95% of the original vegetation has been cleared from the massive Clarence River floodplain, leaving the small rainforest remnant along the river bank adjacent to the Maclean High School. This is also an important traditional maternity roosting site for the Grey-headed Flying-foxes, with pregnant females arriving to give birth between August to October each year to coincide with the spring Eucalypt flowering across the Valley.

Historically the colony has consisted predominately of Grey-headed Flying-foxes, but these have shared their habitat with varying numbers of Little Red Flying-foxes, and, increasingly over the past two decades, with Black Flying-foxes, which have extended their previous range across the northern regions of Australia southward into NSW and are now regularly found roosting at Maclean.

Black Flying-foxes were once also listed as threatened in NSW, however their increasing numbers and competition for food and habitat, exacerbating problems associated with shortages experienced by Flying-foxes generally, have caused them to fail the criteria and be delisted.



Orphaned Grey-headed Flying-foxes in care, ready for release back into the wild.



Young Black Flying-fox in care



Baby Black Flying-fox in care.



An injured Little Red Flying-fox in care

Flying-foxes forage at night, travelling as much as 50 kilometres to feed off nectar and pollen, and occasionally forest fruits, which they chew to extract the juice before spitting out the left-over fibrous material.

During early maternity the females carry their babies with them while foraging, but as they grow the pups are left overnight at the roost site before being reunited in the early dawn.

Over the past 40 years the Maclean High School has expanded its sporting fields, which entailed extensive clearing of the remnant rainforest. Then, around the turn of this century, extensions to the tuition buildings encroached still further into the Flying-foxes' habitat.

This move sparked serious conflict. Flying-foxes are noisy, and have an odour that is offensive to some people. The situation was not helped by an outbreak of deadly Hendra Virus in Queensland, which, without any firm scientific evidence, was blamed on Flying-foxes. This, coupled with the knowledge that Flying-foxes can also carry another potentially fatal pathogen, *Lissavirus*, resulted in concern by some members of the school community which verged on paranoia.

This led to attempts to relocate the animals using noise and disturbance, something that cost the local council hundreds of thousands of dollars over the next few years. Not only was this disastrous for the Flying-foxes, which were unable to rest during the day, resulting in many dying from starvation, abortion of foetuses and death of pups by separation from their mother, but it also shifted the problem from one side of the school grounds to the other and into neighbouring residential areas of Maclean, into a small forest remnant known as “The Gully”.

In about 2008, as the relocation strategy had clearly failed, the NSW Department of Education, Climate Change and Water (DECCW) refused to renew the Education Department's licence to continue its disturbance program. This led to near riots among the school community and the entire issue became highly politicised.

Despite the health risks being declared minimal by the NSW health authority, the Government was accused of placing children's lives at risk. The local newspaper jumped on the band-wagon and printed a series of highly emotive articles, including one based around a horse breeder who feared for her life because the Flying-foxes flew over her property. The entire matter was out of hand.

Finally though, sanity prevailed, and a working group was set up, made up of stakeholders from both sides of the argument. This resulted in a sensible, workable management plan with revegetation and regeneration as its focus.

At the southern end of the school grounds, along the river bank adjoining the rainforest remnant, is a small triangular piece of cleared land which comprises the school's 'agricultural' plot. There is also a power line and road reserve easement across the area immediately adjacent to the rainforest.

The plan, at this point in time, is to put the powerline underground and to largely revegetate the easement, with some planting already taken place.



Facing towards the Clarence River, the Maclean High School agricultural plot, power line and road easement (directly towards the power pole), and regeneration works (blue plastic tree guards visible right of power pole), with the edge of the rainforest remnant (at right).

It was seen that the currently disused, weed-infested agricultural plot (centre above) should also be planted to rainforest trees. However, some in the school community vehemently oppose this plan, which, we suspect, has more to do with not wanting to accept any Flying-fox presence rather than a real need for the plot for agricultural education purposes. Hopefully this can be resolved in the not too distant future.

With a clear need to reverse public perception (hopefully only among a minority) that Flying-foxes are an evil entity, as depicted in children's fairy tales of wicked witches and devotees of Count Dracula, the Clarence Environment Centre is currently working on putting together a documentary film to show the Flying-fox for what it really is, a highly intelligent, social animal that is a critical link in the biodiversity's chain upon which we humans depend.



The Clarence Environment Centre's film production crew preparing to start filming at Maclean.



Patricia Edwards, Clarence Environment Centre, flying-fox carer, with Billie Roberts, a Griffith University Student who has spent 5 years studying the Maclean flying-fox colony for her PhD