



## WILDLIFE FRIENDLY FENCING

Presentation to 2008 National Wildlife Rehabilitation Conference  
Steve Amesbury on behalf of the Wildlife Friendly Fencing Project

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This presentation was put together in collaboration with Jenny Maclean. The first thing I should do is acknowledge the two people behind the project, Jenny Maclean and Dr Carol Booth from the Tolga Bat Hospital. I am very proud to be giving this presentation on their behalf.

I will very briefly recap on the project, what we have learned.

Those of you who attended the 2007 conference may remember a horror show of slides, detailing the injuries from fencing that is dangerous to wildlife. As you will see, the horror show continues with an expanded cast. However, I have taken pity on this year's crowd and with apologies to Dr Anne Fowler, won't be showing as many graphic images of wet, infected or infested wounds this time.



The initial funding from WWF has run out and the funded activities of the project have come to an end. Some fund raising activities continue, and the initiative remains active. But to a large extent it is now up to you and me, to learn from what has been achieved, and to keep up the pressure. Raising awareness is a major part of the project and the website and newsletter will continue as long as Jenny has the time. We strongly encourage you to help with the administration, or by contributing to the newsletter.

By tackling fencing that is harmful to wildlife, we reduce the suffering caused, and serve conservation, as many threatened species fall victim of fencing that is far from wildlife friendly.



Achievements during the project include the completion of the draft barbed wire action plan, by Dr Carol Booth, the information website, brochures, bookmarks, trials, and case studies.

Volunteers from several wildlife groups have provided information, reports, pictures, and displays and presentations have been given at community events, schools and eco-fairs. More information can be found on the website.

In last year's presentation we focused on the damage done by barbed wire. While we pointed out that over 70 species were documented victims most of our photos were of flying foxes.

That was partially because most of our photos happened to be of foxes on barbed wire, but also because they seem to be the species most impacted.

The project found that there were even more species than we thought that fell victim to poor fencing, or fencing inappropriate to the local wildlife.



As you see from these graphic photographs, flying-foxes are not the only victims and barbed wire is not the only culprit, even if it is public enemy No. 1.

It is not possible to show all the photos, including a koala trapped by cyclone mesh fencing, and many, many other examples of wildlife impaled on barbed wire. As we keep saying, it is all about the right fencing in the right environment.



This macabre picture is not as rare as it should be. The project was sent many such pictures from around Australia. In fact a very similar photo can be seen on the website, taken almost 100 years ago. The problem is not new, and it is not going away.

Unfortunately this trap is fatal in the majority of Kangaroos. Even if found in time, Myopathy can result in a fatal outcome. While the cause is obvious, the solution is less so.

It is important to understand that the more hot-spot criteria are involved, the higher the chances of entanglement.

One of the things constantly hammered home is that we need to take into account the context. That is, where is the fencing in relation to food and water sources? When was it erected? What local species are nearby and what are the geographic features?



**Predisposing factors** (*from the draft action plan*)

Any barbed wire presents a risk of entanglement, but the risks seem to be greatest in the following circumstances:

- During the night: Most entanglements are of nocturnal creatures that probably do not see wire in the dark.
- Fences across flight/glide paths: Larger birds and bats such as flying foxes and ghost bats save energy if they fly close to the ground, so are vulnerable to fences in their flight path.
- Windy weather: In windy weather, bats and birds, particularly juveniles whose flight is weak, have problems gaining enough height above a fence or are blown onto a fence.
- Fences on ridge lines or where they are higher than surrounding vegetation (eg. around new plantings):
- Fences near food trees: As a flying animal leaves or is chased from a food tree it may dip and become entangled in a nearby fence.
- Fences around water: Flying foxes and water birds get entangled on their flight to and from sewage ponds, wetlands and waterholes. Crane wingspan is up to 2.5 metres, and their long legs hang down for landing and take-off, so they need enough space around a wetland to take off.
- Across watercourses or submerged in water: Platypus and water birds become entangled on barbed wire in and across water.
- New fences: Newly erected fences, where there were none previously, have high rates of entanglements (e.g. ghost bats in the Pilbara).
- Fences on forest/cleared land ecotones: Fences in these areas cause problems especially for microbats.



You can get all of this information, with a lot more detail from the draft action plan, which is also available (like everything these days) via the Internet.

## NETTING

The solution for wildlife caught on netting is education.

People need to know how to erect netting so that it is tightly strung over the tree using some form of structure. Some new brochures are now available, and there is information on the WFF website, as well as many others.

As you know animals including birds, bats and reptiles are regularly entangled in poorly strung netting, and the worst is black monofilament.



### From the NSW National Parks and Wildlife Service Website:

Under this legislation, it is an offence to harm a protected or threatened species. You can harm species by netting, trapping, capturing, injuring or killing them. If you put up a netting structure, you must make sure that the structure does not trap or injure protected and threatened animals. You could be prosecuted if you fail to do this.

#### **Unacceptable netting structures**

Any netting structure that may lead to harm of native animals is unacceptable and should not be used. For example, throw-over netting, which is hung loosely over trees or support structures, often entangles flying-foxes and other animals, leading to injury or death.

#### **Acceptable netting structures**

Any netting structure must be properly tensioned and held away from trees to minimise the risk of entangling wildlife. Two recommended types of structure are full exclusion netting and tunnel netting.

#### **Full exclusion netting**

This is the preferred option. It is suitable for larger orchards with close tree and row spacings. It consists of a flat canopy held permanently by a rigid structure of poles and tensioned cables over the entire orchard.

Full exclusion netting has numerous benefits. It can:

- keep out animals such as fruit-eating birds, flying-foxes, fruit-piercing moths, possums, rodents, hares and wallabies which may cause damage to crops
- protect crops from wind and hail damage
- provide fruit trees with a superior microclimate, depending on crop and location
- help contain spray drift
- offer an environmentally sound practice
- cost relatively little to maintain. Good quality nets can last up to 10-12 years and netting frames up to 40 years. Maintenance will be required to repair torn netting and retention structures after hail or storms.

## Hot-Spots

While we can encourage people to stop using Barbed wire unless it is absolutely essential, there will always be barbed wire – and we will never be able to stop random entanglements as long as barbed wire exists.



However, the information gathered by the project, and our own experience indicates that the 99% of the injuries occur in very specific circumstances, which probably relates to less than point 1 percent of the barbed wire so it follows that if we focus on those hot-spots, that we will have the most Impact.

So as we have discussed, focus on replacing, covering or highlighting unsafe fencing in those areas, and help get the message out to farmers, businesses and property owners. Jenny tells me that she was surprised by how cooperative many people were when approached to take place in a trial or case study.

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## Some Solutions

One option is to increase visibility, such as these colourful tags on the top strand of barbed wire, using old electrical fencing tape, or a use for all you old Celine Dion CDs!



There is more detail on the WFF site, including the draft barbed wire action plan, which looks at the costs and effectiveness of barbed wire versus plain wire, and other suggestions to combat the effects of dangerous fencing.

However, I have been most impressed by an invention from Desiree and Chris Marshall in the Northern Rivers Wildlife Carers Group. While they call it the polypipe splitter and applicator, I like to refer to them as...

## THE BARBINATOR!



This device is a simple and very easy way of splitting 25mm poly-pipe. The tubing we used for watering systems (before water restrictions). Polypipe comes in a few sizes, but the 13 and 19mm is too small to fit over barbed wire. We find that the 25mm is a perfect, snug fit. I found it at about \$40 for 50 meters but perhaps we may be able get it cheaper with a bit of haggling.

However, this little baby is just the splitter, there is also an applicator which after a few goes, makes the process of covering barbed wire a breeze. Obviously this is Barbinator 2.

We have a video that we can provide that was taken while we used the Barbinator for the very first time: What it demonstrates is how easy it is to use.

This was a real situation where we covered all the strands of barbed wire which straddled a small watercourse, and then ran alongside fruit trees.

We had previously rescued bats impaled on barbed wire from this location.



## In Conclusion

The main issues we wished to get across today are:

1. There are many native species, and too many individual animals needlessly killed as a result of poor fencing
2. Barbed wire remains a major offender, but there are other forms of fencing and netting that can be dangerous
3. Look for one or more predisposing factors (hot spot indicators) – allowing you to focus efforts on the main danger areas. Whether or not fencing is dangerous to wildlife depends on its location and context
4. There are a number of ways to tackle the problem. We only highlighted one or two in this presentation.
5. For more information and ideas, and to learn how you can help, go to [www.wildlifefriendlyfencing.com](http://www.wildlifefriendlyfencing.com)