Mr. Rob Hansen,
Research Director
Agriculture, resources and Environment Committee
Parliament House
Qld.4000

20-08-2012

Dear Mr. Hansen,

This submission is regarding the Bill presented by Mr. Shane Knuth on the 21st June 2012, titled,

Land Protection Legislation (Flying-fox Control) Amendment Bill.

Part2 Amendment of Land Protection (Pest and Stock Route Management) Act 2002

Clause 2 Act amended

This part amends the *Land Protection (Pest and Stock Route Management) Act 2002*

We strongly object to all aspects of the bill submitted by Mr. S. Knuth suggesting, that Flying-foxes should be included in the *Land Protection (Pest and Stock Route Management) Act 2002* as pests; and amendments to the *Nature Conservation Act 1992*.The Grey-headed Flying-fox *Pteropus poliocephalus* and the Spectacled Flying-fox *Pteropus conspicillatus* were listed as vulnerable by *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) in 2001/2002 respectively.

- Flying-foxes are vital for the regeneration of our native forests, their diet of nectar, pollen and native fruits come from at least 40 eucalypts and 66 other plants. Their feeding behaviour results in pollen and seeds being moved many kilometres from the parent tree, stimulating viable seed production. This process is important in maintaining the diversity of our forests and is essential for the health and vigour of our natural ecosystems.

The Land Protection (Pest and Stock Route Management) Act 2002 states; *Page 32, 42 releasing a declared pest;*
(1) A person must not, without reasonable excuse, release a declared pest other than under a declared pest permit.

- If Flying-foxes become listed as pests, what will Flying-fox carers and rescuers do with the animals fit enough to be released back into the wild, for example, orphaned young.

Clause 3 Insertion of new ch2, pt 11 page 4 (12, 13, 14)

Part 11 Control of flying-foxes
96A Definitions for pt 11 page4 (16, 17, 18)

And

- Page 4 and 5 **Part 11 Control of flying-foxes** (a) 1, 2.and(b)3,4,5,6,7,8,9,10,

goes against the;
ANIMAL CARE AND PROTECTION ACT 2001 Reprinted as in force on 1 December 2009
For example; CH. 3 (p19 – 35) it is an offence to;
(a) causes it pain that, in the circumstances, is unjustifiable, unnecessary or unreasonable;
(b) beats it so as to cause the animal pain;
(c) abuses, terrifies, torments or worries it;
(g) kills it in a way that—
(i) is inhumane; or
(ii) causes it not to die quickly; or
(iii) causes it to die in unreasonable pain;
(h) unjustifiably, unnecessarily or unreasonably—
(i) injures or wounds it;

Division 3 Baits or harmful substances;
(1) A person, other than the following, must not, with the intention of injuring or killing an animal, administer to, or feed, the animal a substance that the person knows is harmful or poisonous to it—
(a) an inspector;
(b) a prescribed entity;
(c) a veterinary surgeon.

(2) A person must not, with the intention of injuring or killing any animal, lay bait or a substance that is harmful or poisonous to any animal.

Page 5 Part 11 96C Control of flying-foxes
(1 *…that removal or destruction of a flying-fox is necessary to reduce the risk of disease or harm to a resident……*

- *(Figure 1. Public Health)*
- (b)and (c) are all in breech of the ANIMAL CARE AND PROTECTION ACT 2001

(2) *…...A landowner may do any of the following on the owner's land-*
(a) destroy a flying-fox;
(b) disturb or drive away a flying-fox
(c) destroy or disturb a flying-fox roost

- Depending on the method used *to drive* or *destroy Flying-foxes* on land owner's properties, could result in injuries or death to humans, cattle and domestic pets from stray bullets/pellets missing the target.

(3) (a) … *size of population……*

- The population and species of colonies alters throughout seasons depending on the availability of native food

(c)…. *risks associated……*

- Pregnant Flying-foxes and lactating females with dependent young, how many different species roosting in the colony.
- To solve the problem of Flying-foxes roosting in urban/school areas and 'raiding' orchards we need to look at the causes for example;

Have Flying-foxes moved closer to humans and why, or have humans encroached on them through activities such as land clearing for housing and agriculture, resulting in the Flying-foxes loosing their roosting sites(trees) and native food.
Human activities have played a major role in their decline for example, between 1989 and 2001, the endemic, Grey-headed Flying-fox (GHFF) *Pteropus poliocephalus* numbers declined by 30%. Their survival was estimated as 10 to 15 years before extinction. However, their numbers have declined further as a result of starvation due to lack of native food therefore, it is now estimated at10 to 12 years.

To solve the problem in urban areas and schools requires education about the importance of these animals for our environment, why they have moved closer to urban areas and schools and what health risks there are.*(Figure 1. Public Health)*

The reintroduction of damage mitigation permits (DMP'S) allowing shooting of Flying-foxes in orchards will not solve the problem; instead it will subject the animal's to cruelty. In 2000 alone 112 damage mitigation permits were issued and more than 12,000 Flying-foxes were killed, not counting the 18,000 Spectacled Flying-foxes who were illegally electrocuted on a north Queensland property**.**

Shooting as a means of crop protection can only be described as inhuman and results in the animals dying a slow painful death. As explained by Anja Divljan1, 3, Kerryn Parry-Jones1, Peggy Eby2 in the Australia ***zoologist volume*** 36(3)

Deaths and injuries to Grey-headed Flying-foxes,
Pteropus poliocephalus shot at an orchard near
Sydney, New South Wales

Shooting of Flying-foxes takes place at night and a high rate of wounding is inevitable due to night time visibility. *(Figure 2)* and coincides with the birthing season resulting in the majority of Flying-foxes being pregnant or lactating females and is likely to be a major factor in their decline *(figure 3*) Autopsies performed on Flying-foxes killed by shooting found that most had died slowly due to hemorrhaging from internal wounds rather than instantaneously.*(figures 4, 5)*
There is considerable evidence that a high percentage of flying-foxes shot in orchards do not die from the initial shotgun blasts. (*Figure 6)*
It is stated in the (Australian ***zoologist volume*** 36(3)). 'Flying-foxes shot under licence in NSW. In the 2006/07 season the average number of (GHFF's) licensed to be harmed was <40 individuals per licence. Despite this, a total of 164 dead or injured flying-foxes were collected.'
The sex ratio was strongly skewed towards females (1:1·73), of which 54 (65%) were lactating at the time. Thirteen of these were shot while carrying their dependent young, while 41 neonates would have been left behind in the camp to die. Hence, the total estimate of flying-foxes that died due to shooting in the orchard over the two-week period was 205. Collected bats suffered from various injuries, and at least 30% (44% including the neonates left in the camp) were alive and unattended more than 8.5 hours after shooting. This is in contravention of the definition of 'humane killing' and the Prevention of Cruelty to Animals Act 1979.
There is considerable evidence that a high percentage of flying-foxes shot in orchards do not die from the initial shotgun blasts. If POCTA provisions are adhered to, then it is the responsibility of the orchardists to take the time and effort to locate injured animals and kill them humanely. Very few injured flying-foxes were 'mercy killed' by the orchardist in this study and a relatively large percentage of injured animals (44%) could potentially have lived for many days before dying. Hence neither the legal requirements of the DECCW licence nor the ethical guidelines suggested by NHMRC (2004) were followed. However, even if the provisions of the licence and the welfare issues regarding the problem flying-foxes in the orchards had been fulfilled, it is unlikely that the shooting of flying-foxes could ever be seen as humane under the POCTA 1979.

The only humane method is exclusion netting, unfortunately it is expensive, therefore as suggested before, the Government could introduce a scheme similar to the University students HECS scheme. Farmers receive a subsidy for the initial cost of installing exclusion netting, then once they start to receive income from their crops the subsidy is to be paid back as a whole or in instalments. This can be done through the Australian Tax Office.

Figure 1 **Public Health Facts**

Lyssavirus;

I. This can only be contracted from a deep bite or scratch from handling the infected animal.
II. Of the two deaths from this virus; the first one in 1996 was the result of a bite from a Yellow-bellied sheathtailed bat *Saccolaimus flaviventris* not a Flying-fox. The second person to die from Lyssavirus in 1998 did not receive the then available post exposure vaccine.

There are two simple steps to avoid Lyssavirus;

I. don't handle bats unless you are trained in handling them and vaccinated against rabies
II. if you are bitten or scratched by a bat, wash the wound thoroughly and seek immediate medical advice about injections to protect you against infection.(*Qld. Health*)

Salmonella;

According to the Queensland Health;
Salmonella is found in animal faeces. Most cases of Salmonella in Queensland are cased by eating undercooked or raw food contaminated with Salmonella bacteria. The infection may also be acquired from close physical contact with animals such as dogs, poultry and cattle, it is assumed (not scientifically proven) *that some Flying-fox may carry the bacteria.* Taking into account these animals are predominantly nectar feeders not carnivores (meat eaters).

Leptospirosis;

is a bacterial disease transmitted via the urine of infected animals. In very rare cases, Leptospirosis can be fatal to humans. Although rodents and cattle are the main carriers of this disease, bats may also be infected.

- To date there is no scientific papers stating that Flying-foxes spread this disease to humans.

SARS;

is spread mainly by close person to person contact. The virus is transmitted by someone who is unwell with the illness via infected respiratory droplets produced when coughing or sneezing. Droplets are propelled a short distance through the air and land on the mucous membranes of the mouth, nose or eyes of a nearby person. The virus can also spread from a person's hands after touching a contaminated surface and then touching their mouth, nose or eyes.

- There is no mention that Flying-foxes carry or spread this disease.

Hendra virus;

- To date there is no scientific evidence that the Flying-fox is the sole vector, and no evidence that the virus can be passed directly from flying foxes to humans. Testing of bat carers who have frequent contact with flying foxes has shown no evidence of exposure to the virus.

We question the percentage of horses as stated by Mr. Knuth as a 70% fatality rate, what percentage had the live virus at testing and what percentage only had the Hendra antibodies

In a published paper by the CSIRO *Transmission studies of Hendra virus(equine morbilli-virus in fruit bats, horses and cats' Aus Vet/Vol 76, No 12, December 1998 813*, it states, ***conclusions*** *It is possible to transmit HeV from cats to horses. Transmission from P.poliocephalus to horses could not be proven*.

Figure 2. P. *poliocephalus* flying at dusk. Individuals are small, dark and difficult to see, and most of the exposed surface area of flying-foxes is the large wing span. Hence, to ensure that the flying-foxes are killed in a humane way (targeting the head or the chest), expert skill and good judgement of the shooter are required. Photograph: Vivien Jones.

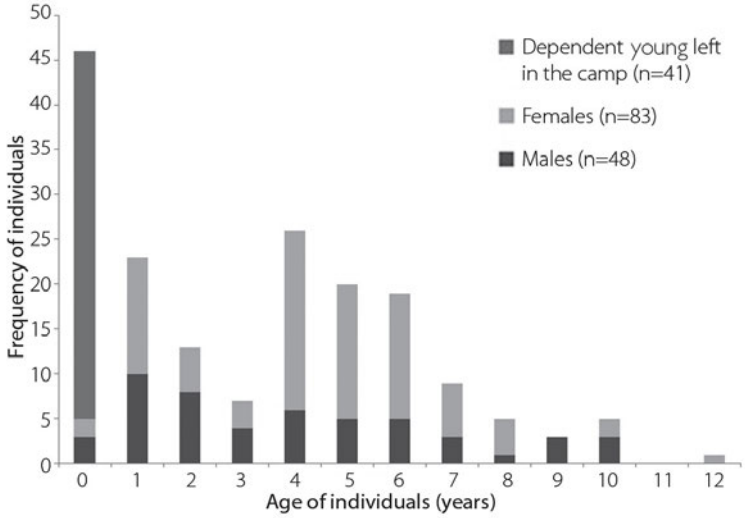

Figure 3. Age distribution of the shot flying-foxes collected in November 2007, and dependent young that would have been left in the camp. The age distribution is driven primarily by the larger sample of female bats, particularly between the ages. Australia ***zoologist volume*** 36(3)

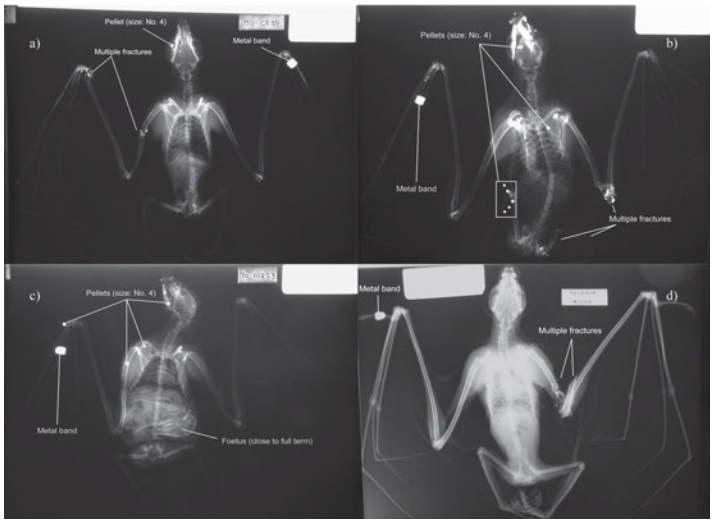

Figure 4. Examples of injuries in shot flying-foxes. a) A bat that has been shot in the head. The autopsy revealed haemorrhaging around the right eye socket (the pellet is still embedded in the region), fractures of the right humerus and distal radius and ulna, several holes in the wing membranes and contusion of the right

lung. b) X-ray of a shot flying-fox with extensive body trauma: internal haemorrhaging, rib and sternum fractures, and limb bone fractures. Note, however,

Figure 5 Photo: Australian Wildlife Hospital
This animal would die a slow agonising death unless rescued by a Flying-fox carer.

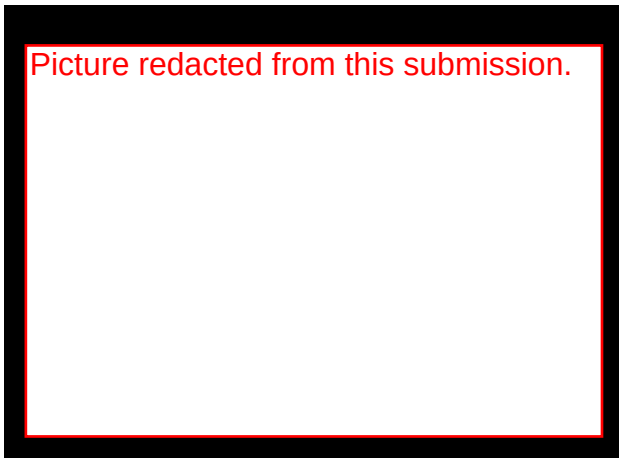

Figure 6 External assessment of a head injury showing a compound fracture of a large portion of the cranium exposing the brain. The nature and position of the injury indicates a close-range shot of the bat on the ground (it was probably brought to the ground, but not immediately killed, by another shot that shattered one wing).
Anja Divljan1, 3, Kerryn Parry-Jones1, Peggy Eby2)

Yours sincerely

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