IN THE PLANNING AND ENVIRONMENT COURT
AT BRISBANE No. BD 4658 of 2004

BETWEEN: **CAROL JEANETTE BOOTH**

Applicant

AND: **FRIPPERY PTY LTD (ACN 010 890 007)**

First Respondent

**MERVYN MEYER THOMAS**

Second Respondent

**PAMELA ANN THOMAS**

Third Respondent

# APPLICANT'S REPLY FOR RE-TRIAL

## CONTENTS


INTRODUCTION ..... 1
LEGAL ISSUES RAISED BY RESPONDENTS ..2
Black flying foxes are protected animals ..... 2
Constitutional issues ..... 3
Land is not a protected area ..... 3
Respondents' objections to evidence ..... 3
PROOF OF TAKING PROTECTED ANIMALS ..5
Second respondent's admissions ..... 5
THE SUBSECTION 88(3) DEFENCE ..... 9
EXERCISE OF DISCRETION ..... 9
Appendix 1: Electric grids and numbers of flying-foxes electrocuted ..... 11


## INTRODUCTION

1. The "Respondents' Closing Submissions on Re-Trial as to Law and Fact" ("**the respondents' submissions**")[1] raise a series of legal matters but largely fail to address the substantive matters raised in this case for the Court's determination.

2. To assist the Court in focusing on the principal issues for determination the applicant repeats that, while largely not addressed by the respondents' submissions, the principal issues for the Court's determination are:

[1] The document is dated 7 October 2007 on the first page and 6 October 2007 on the final page.




Environmental Defenders Office (Qld) Inc
Level 9, 193 North Quay
Brisbane Qld 4000
Telephone: (07) 3211 4466
Facsimile: (07) 3211 4655
Email: edoqld@edo.org.au

(a) whether the applicant has shown on the balance of probabilities[2] that the respondents have in the past[3] or will in the future kill, injure or harm flying foxes by the use of the electric grids constructed on the farm (i.e. whether there has been or will be a "take" of a protected animal);

(b) whether the respondents have shown on the balance of probabilities that the defence in subs 88(3) applies to their past, present and stated future conduct because:

(i) the taking happened or will happen in the course of a lawful activity;

(ii) the lawful activity was not directed towards the taking; and

(iii) the taking could not reasonably have been avoided; and

(c) if the Court is satisfied an offence against s 88 of the Act has occurred or will occur, whether it should exercise its discretion to grant the relief sought or any relief.

3. One additional matter that is not in dispute is that the respondents do not hold and have not held at the relevant times an authority to take flying foxes under the *Nature Conservation Act 1992* ("**the Act**") or regulations.

4. The respondents' submissions raise a number of legal issues that will be responded to before returning to consider the substantive issues.

## LEGAL ISSUES RAISED BY RESPONDENTS

### Black flying foxes are protected animals

5. The respondents' submissions suggest that Black Flying-foxes (*Pteropus alecto*) have never been prescribed as required by ss 79 or 80 of the Act.[4] The respondents submit "it is not sufficient to simply rely on a general regulation that does not specifically refer to the animal in question or prescribe the animal in question."[5]

6. The respondents' submissions on this point are incorrect as s 80 of the Act provides that "a regulation may prescribe native wildlife as least concern wildlife …" where "wildlife" is defined in the Schedule as "any taxon or species of an animal, plant, protista, prokaryote or virus." Taxon is not defined in the Act but its ordinary meaning is "a term used to denote any taxonomic category, as species, genus, etc."[6] As explained by Ms Thiriet, the scientific classification of Black Flying-foxes are Class Mammalia, Order Chiroptera, Suborder Megachiroptera, Family Pteropodidae, Genus *Pteropus*, species *alecto*.[7] There is, therefore, nothing in the respondents' point. The Act permits the regulations to prescribe protected wildlife according to any taxon, not

---

[2] The onus of which lies on the applicant but in this case is considerably assisted by the respondents' evidence.
[3] Since the commencement of the Act and protection of flying foxes under it in 1994.
[4] Respondents' submissions pp 1-8.
[5] Respondents' submissions p 4.
[6] *The Macquarie Dictionary* (Revised 3rd ed, 2001), p 1927. "Taxonomy" is defined as "1. classification, especially in relation to its principles or laws. 2. that department of science, or of a particular science, which deals with classification." (ibid).
[7] Affidavit of Dominique Thiriet (21 December 2004), p 2.

merely to species level. The Class Mammalia is a taxon and, therefore, the prescription by the *Nature Conservation (Wildlife) Regulation 2006* of "a mammal that is indigenous to Australia, other than [specified excluded categories]" complies with the requirements of s 80 of the Act.

**Constitutional issues**

7. The respondents submissions, at pages 8-12, raise constitutional matters that are all without foundation and irrelevant. As noted in the applicant's closing submissions at [6], the Commonwealth corporations power is irrelevant and there is no question of the legislative ability of the Queensland Parliament to enact the Act.[8] The State of Queensland has not "ceded" the power to protect native wildlife under the *Corporations Law* as suggested by the respondents. Contrary to the submissions on page 10 of the respondents' submissions, there is no question that the Act applies to freehold land whether purchased before or after the commencement of the Act.[9]

8. The respondents' submissions, at page 9, suggest the respondents are entitled to a trial by jury under the *Commonwealth Constitution* and other matters associated with criminal trials. As the proceedings involve civil enforcement under s 173D of the Act, no right to trial by jury arises under the *Commonwealth Constitution* and the issues raised by the respondents relevant to criminal prosecutions are not relevant.

**Land is not a protected area**

9. The respondents' submissions, at pages 8-9, raise the dissenting judgment of Jerrard JA in *Phillips v Spencer* [2005] QCA 317 at [25]-[38]. However, the respondents' land is admitted not to be in a protected area under the Act and, therefore, his Honour's dissenting views are not relevant to these proceedings.

**Respondents' objections to evidence**

10. The respondents' submissions, at pages 13-14, object to parts of the evidence of Dr Booth and Ms Thiriet being admitted on the basis that it was illegally obtained. The applicant's previous submissions in relation to the exercise of the Court's discretion according to the principles in *Southern Equities Corporation Ltd (in liq) v Bond* (2001) 78 SASR 554 at 563-571 will not be repeated here.[10]

---

[8] There is no question the *Nature Conservation Act 1992* and the *Integrated Planning Act 1997* are constitutionally valid and apply to freehold land in Queensland, including the respondents' land: *Bone v Mothershaw* [2002] QCA 120; [2003] 2 Qd R 600; (2002) 121 LGERA 75 (McPherson, Williams JJA, and Byrne J); *Dore v State of Queensland* [2004] QDC 364 (Bradley DCJ); *Burns v State of Queensland* [2004] QSC 434 (de Jersey CJ); *Phillips v Spencer* [2005] QSC 053 (Jones J); *Phillips v Spencer* [2005] QCA 317 (de Jersey CJ, McMurdo P, and Jerrard JA); *Dore v Penny* [2006] QSC 125 (Jones J); *Burns v State of Queensland & Croton* [2006] QCA 235 (Jerrard JA, Cullinane and Jones JJ); *Booth v Yardley* [2006] QPEC 119 at [33] (Wilson DCJ).

[9] See the cases cited at footnote 8.

[10] However, it may be noted that the respondents' reference, on page 15 of their submissions, to s 98 of the *Evidence Act* 1977 (Qld) as conferring the discretion to exclude evidence illegally obtained is incorrect. Section 130 of the *Evidence Act* maintains the common law principles as to the judge's discretion to exclude evidence in criminal trials. There is no corresponding provision for civil proceedings but the *Evidence Act* is not a Code or complete restatement of the law of evidence and the common law principles continue to apply to the extent that they are not modified by the Act. The applicant accepts that the Court has a discretion to exclude evidence that is illegally obtained. The applicant submits that the decision of Lander J in *Southern Equities Corporation Ltd (in liq) v Bond* (2001) 78 SASR 554 at 563-571 provides useful guidance on how this discretion should be exercised in civil proceedings.

11. While the respondents continue to object to parts of the evidence of Dr Booth and Ms Thiriet gained by trespassing on the respondents land, that objection is now largely a nonsense because during cross-examination the second respondent accepted their observations of dead flying foxes in 2004 and admitted to killing large numbers of flying foxes in earlier years. During the following exchange in cross-examination the second respondent embraced Dr Booth's evidence:[11]

> I'm asking you, Mr Thomas, because you live there and you clean these bats down every day so you must have a good idea about how many were killed and not killed at that time?-- That's right, and I'm saying you're way over the top here.
>
> Okay. Well, how many are killed, 2004, obviously a lot of - a lot of mucking around with Dr Booth and going to Court?-- I didn't - the ones that were killed were left on the ground and Dr Booth found 29, so she says.
>
> Okay. Well, you were clearing - for the whole of that fruit season you were clearing bats from the electric grids when they're caught?-- Yes.
>
> How many did you clear each night on average?-- Twenty-nine.
>
> On average?-- For the year.
>
> No?-- Because that's all Dr Booth found.
>
> No, Mr Thomas, that's what she found in a small portion of your property but you're clearing bats from your entire property, so you must - you do that each day, don't you? You go out and you clear the bats, and you agreed with me before?-- Yes.
>
> So now, you don't want to - you're saying that she found everything?-- Well, the example I gave you, one bat every 16 nights in the four fences that she inspected is fair mathematics.
>
> Well, she found five in one night, five new bats in one night, so would you accept that for the entire property? Is that fair?-- No, I won't.
>
> …
>
> Well, how many on average did you clear in that year from your whole - your whole system your whole grid?-- The 29 bats that Ms Booth found.
>
> So - I must be deaf, but I - you're saying that she just happened to come across five new bats on the property on that night?-- And she included them with the 22 - 24 that she found on the ground, 29 bats, and that was the total bat count over 119 days.

12. Considering the second respondent's acceptance of the numbers of flying-foxes killed in 2004, even if the objections to the evidence of Dr Booth and Ms Thiriet are upheld and that part of their evidence excluded, the second respondent's evidence establishes that the respondents killed 29 flying-foxes in 2004.

13. It should be noted in relation to the second respondent's truthfulness, however, that while the second respondent accepted the observations of Dr Booth and Ms Thiriet on his farm in 2004 were correct during cross-examination, he denied the numbers killed in his affidavit. At paragraph 69 of his affidavit of 4 July 2005 he stated, "I deny the numbers of alleged dead flying foxes as stated in [Dr Booth's] affidavit".

14. Apart from these legal issues the respondents' submissions dealt briefly with factual matters at pages 16-18. These submissions are best addressed in the context of the three major issues for the Court's determination set out in the introduction. They will, therefore, be considered under the headings:

    (a) Proof of taking protected animals;

---

[11] Transcript, page 224, line 48 – page 225, line 55.

(b) The subs 88(3) defence; and

(c) The exercise of discretion.

## PROOF OF TAKING PROTECTED ANIMALS

### Second respondent's admissions

15. The second respondent admitted to killing large numbers of flying foxes in previous years, however, there was considerable inconsistency in his evidence. The second respondent appears to be deliberately evasive and vague where he believes it does not assist his case.

16. Consistent with his original denial of any deaths in 2004 at paragraph 69 of his affidavit, the second respondent was evasive on giving specific numbers during cross-examination other than admitting to 29 flying-foxes being killed in 2004. For example, during cross-examination he stated:[12]

> Sir, you're trying to lock me into an actual situation which I can't recall and have got no intention of recalling.

17. The second respondent did, however, recall picking up trailer loads of dead flying foxes but was evasive on making specific estimates of the numbers killed. The following exchange during cross-examination is another example of both his admissions of considerable numbers of flying-foxes being killed and his evasiveness on this issue:[13]

> Well, again, 2001, how many do you say you kill each night? I mean, you walk around the whole farm. You clean all the grids each morning. How many do you normally get in a bad year when they're a really bad infestation?-- I mentioned before it's - I'd never estimate two trips. I use a tractor and a trailer and I've never had to make two trips.
>
> Okay, so, you fill up the trailer with the dead bodies?-- Well, as many as there are.
>
> Well, how big is the trailer?-- On some occasions, some occasions where the stink is - when the stink is particularly bad. Normally, they fall down in the tree, I leave them as a fertiliser under the tree.
>
> Okay and then you just let them rot there-----?-- That's right.
>
> go round and use a shovel to pick them up, is that what you do?-- That's right, yes.
>
> And you fill, what, just a normal trailer behind a tractor?-- Yes.
>
> With - how many animals would you estimate?-- Forty or 50 I guess.
>
> And that's what, a night, a week?-- No, usually I do it in the morning.
>
> Sorry, say that again, that was unclear?-- As you said, I do it daily, in the morning, generally.
>
> Okay, so, it's 40 or 50 daily?-- Not on every occasion, no.
>
> Well, in what year is it 40 and 50, is that recent years?-- I can't recall, sir.
>
> Okay. Well, you say 40 or 50. What's the sort of average? If you don't do it all the time, you drive on the tractor. You pick up all these flying foxes?-- Not every day, sir, and depends. I might use the tractor and trailer once a week.
>
> But you must clear the lines every day?-- Yes.
>
> Do you walk the whole property?-- Yes, every day.

[12] Transcript, page 223, line 10.
[13] Transcrip, pages 229-231.

> Okay, so, you walk all your grids and you clear all the bats?-- Yes.
>
> How many do you normally clear down?-- Recently only one or two.
>
> What, just per night over the whole grid - over the whole grid system?-- No, over the whole farm.
>
> last few years, since I've concentrated on making a non lethal system.
>
> Okay. So that's, what, last year one or two a night?-- Last year we caught absolutely nil, sir.
>
> Okay. Well, when is it the one or two per night? When did you start to get that sort of average?-- 2002/2003.
>
> And then how long - how long did you keep going with that sort of one or two per night?-- The bulk of the 50 days that we were working that would be the average sort of situation; at the peak of the season there might be two or three. Early in the season there might be none.
>
> Okay. But you say on average one or two; that's 2002, 2003, 2004, same sort of numbers? You had a whole range; is it just when you're starting to trial your Mark 7, so that must be - you had a bad flying fox population?-- 2004 we had the numbers, sir, exactly.
>
> And what were they?-- Twenty-nine.

18. While the second respondent appears to be deliberately evasive and vague where he believes it does not assist his case, if the figures he supplied in his affidavit are taken as "approximate" or "average" numbers of flying foxes killed on his electric grids—as stated in his affidavit and under cross-examination in 2005, then the total number of flying-foxes killed each year can be estimated. As was done during cross-examination, this can be done simply by multiplying the number of each type of grid in operation each year by the average number killed per night for each type of grid for the normal operating season of 55 nights.

19. Using this approach and based on the numbers admitted to be killed by the second respondent on each type of grid being averages, the total number electrocuted from 1987-2004 was 102,550 (see Appendix 1 for details and references). However, a discount needs to be applied to allow for years when the fruit crop failed and the grids did not need to be operated. Based on paragraph 62 of the second respondents' affidavit, the crop appears to fail approximately 1 in every 3 years, or 30% of the time. Applying a discount for drought years and other poor fruit years of 30%, the total would be about 71,785 flying-foxes killed by the electric grids. The equivalent total for 1995-2004, when the Act was in force, is 57,670, which with a discount of 30%, reduces to a total of 40,369.

20. However, under cross-examination during the re-trial, the second respondent disputed that the figures supplied in his affidavit represented "approximate" or "average" numbers killed on his grids, and stated that they represented the maximum capacity of the grids.[14] When pressed about numbers killed on the grids he stated that the totals killed were about 10% of the totals gained from calculations. For example, when asked whether he accepted killing "about 10 per cent" of a calculated 15,125 in 1997, after referring to picking up trailer loads of dead flying foxes,[15] the second respondent answered:[16]

> At the outside but as I say I still can't recall picking up more than 1,000 bats ever.

---

[14] See the cross-examination of the second respondent at pages 196-198 of the transcript where the inconsistencies were raised.
[15] Transcript, page 206, lines 35-40. See also later references to trailer loads at pages 229-231.
[16] Transcript, page 210, line 11.

21. If this 10% claim is accepted and applied for all years, then it is likely he observed about 10,000 flying foxes killed on his grids from 1987-2004, and about 5,800 from 1995-2004, the latter period being when flying foxes were protected under the Act (see Appendix 1 for details and references).

22. However, Mr Thomas's claims to have much lower levels of flying fox take—at less than 10% of the capacity of the grids—is in tension with his other claims about very large numbers, "plagues", of flying foxes entering his orchard and the 80-100% fruit losses he claimed to suffer. If there were many flying foxes in his orchard, making contact with his grid (as he claimed for 2004), then the numbers killed are likely to have been close to the capacity of the grids.

23. Assuming that in those years in which Mr Thomas claims very large flying fox problems (1992, 1993, 1996, 1997, 2000, 2001, 2004) that he killed flying foxes up to about 50% of his claimed maximum, and assuming that in other years he killed about 10% of his claimed maximum, except in those years in which he said the crop failed and we assume no flying foxes were killed, the total number killed from 1987-2004 is 30,972, and from 1995-2004 is 19,092.

24. Accepting the vague and evasive nature of the second respondent's evidence, however generously his evidence is interpreted, on his evidence the electric grids have killed many thousands of flying foxes. On his figures, it seems likely that 20,000-40,000 flying foxes have been killed since the 1994 requirement for a damage mitigation permit to take flying foxes. These claimed observed numbers of dead flying foxes do not include those that died away from the electric grids of injuries sustained by electric shock or juveniles or foetuses killed.

25. Finally in relation to this issue, the second respondent's claim that flying foxes that die on his "non lethal" electric grids die of "frapping" rather than electricity was also discredited during cross-examination. This was in addition to being discredited by the expert evidence of Ms Thiriet and Dr Spencer that "frapping" would not have caused the deaths of flying foxes on the electric grids. During cross examination the following series of questions and answers occurred in relation to "frapping":[17]

> And then what holds them there?-- Because the actual current that flows through the bat is alternating current. It causes muscular contraction within the bat, okay, and in other words it actually becomes rigid, it can't get out.
>
> So it grabs it?-- That's the very reason why in bats that you see they hang there, they are being held because of the age of the fence and an alternating current fence as against a cattle fence running DC.
>
> So it grabs it. You've just described an animal getting electrocuted, Mr Thomas, it hangs there and it can't get away, that's an animal going into ventricular fibulation, isn't it?-- No, sir, it is not. The muscular, if you like contraction occurs at levels approximately one third of that required from ventricular fibulation.
>
> So what causes the death of the animal?-- It can be suffocation because let's face it if you restrain it, and it can't breath it can die in suffocation.
>
> So why can't it breathe?-- Because it's muscles have been contracted.
>
> By the electricity?-- That's right.

26. Consequently, it is submitted that there is a large body of evidence from the admissions of the second respondent that that the respondents' electric grids have

[17] Transcript, page 211, line 39 – page 212, line 5. See also pages 216-217.

killed thousands of flying-foxes in previous years in addition to 29 flying foxes in 2004. The taking of protected animals in previous years is, therefore, clearly established in the evidence.

**Evidence of future taking and expertise of witnesses**

27. As the evidence of taking in previous years is clear, the only real dispute in the evidence is whether the Mark VII grid is likely to take flying foxes in future years. The two relevant witnesses for this issue are the second respondent and Dr Spencer.

28. During the proceedings the Court indicated it would consider the second respondent had some expertise based on his observation of killing flying foxes over many years.[18]

29. Two factors tell strongly against accepting the second respondent's evidence that the Mark VII grid is non-lethal. First, as noted above, the second respondent was vague and inconsistent in his evidence, which suggests he is an untruthful witness. It is submitted the Court should not accept his evidence in relation to not observing dead flying foxes on the Mark VII grid.

30. Other than the idea of "frapping" advanced by the second respondent in an attempt to avoid liability for admissions of past deaths on his "non lethal" electric grid system, the central plank of the respondents' case is that the second respondent has now developed a "non lethal" electric grid system, the "Mark VII", on which he has observed no dead flying foxes since 2004. At the first trial in 2005, however, he admitted that he had observed some deaths on an early variation of the Mark VII. That passage is also relevant to the issue of whether the respondents' field trials of the "non lethal" electric grids involved an experiment on animals contrary to the *Animal Care and Protection Act 2001*. The second respondent stated in evidence-in-chief when explaining the testing of the Mark VII grid (emphasis added):[19]

> All right. Now, you said there was some – some other testing of a – a forerunner of the current mark 7, was it? -- That is correct. The year previously.
>
> Yes. And how was that conducted? -- It was connected to a fence in the normal manner. It was important during the actual construction and setting up of the mark 7 system to establish what we call parameters. These are current levels, times, quantities that would be used in any practical system. Now, this is where the true testing took place.
>
> …
>
> All right. And – and in – in that first lot of testing did you keep any record of the numbers? -- Not really, because just – so few. <u>There probably would have been less than – less than 20 or 30 deaths for that – for that whole year.</u> …

31. The second respondents' evidence is so riddled with inconsistencies, attempts at self-serving statements where he believes it will assist his case, and vague recollections where he believes it will not assist his case that his claim that he has observed no deaths on the Mark VII grid should not be accepted. Even if the second respondent is telling the truth about observing no deaths on the Mark VII grid, the uncontested[20] evidence of Dr Spencer is that death can be quite delayed and need not be immediate. Dr Spencer's view, uncontested during cross-examination, is that the Mark VII grid is likely to kill, injure or harm flying foxes that come into contact with it.

---

[18] Transcript, pages 180-184.
[19] Transcript of trial before Pack DCJ, Day 2 (06/09/2005), page 131, line 55 – page 132, line 35.
[20] Dr Spencer was challenged on his expertise but not questioned or challenged on his opinion that the Mark VII grid designed by the respondents is likely to kill, injure or harm flying foxes.

32. The second factor that tells strongly against accepting the second respondent's evidence is that Dr Spencer clearly has far greater expertise and impartiality in relation to assessing the impacts of electricity applied to flying foxes in the manner done by the Mark VII grid and other grid systems. His evidence was virtually unchallenged during cross-examination. No challenge was made to his credit or impartiality. It is submitted that his evidence should be preferred by the Court and, consistent with his opinion, a finding made that the Mark VII grid is likely to kill flying foxes.

33. Even if the Court accepts the second respondent's evidence that the Mark VII grid is non-lethal, the evidence of Dr Spencer that the grid is likely to injure or harm flying foxes that collide with it was unchallenged during cross-examination and is ignored by the second respondent's evidence. It is submitted the Court should accept Dr Spencer's unchallenged evidence on this point and, therefore, find that the Mark VII grid is likely to take protected animals in the future by injuring or harming flying foxes.

**THE SUBSECTION 88(3) DEFENCE**

34. As the evidence, it is submitted, clearly establishes taking of protected animals in past years and in the future, the next issue for the Court to determine is whether the subs 88(3) defence applies to either the past or future taking.

35. The applicant's closing submissions addressed this defence in detail at [23]-[40]. Those submissions will not be repeated here, other than to note the passage set out above at [30] is also relevant to the issue of whether the respondents' field trials of the "non lethal" electric grids involved an experiment on animals contrary to the *Animal Care and Protection Act 2001*. The second respondent himself spoke of "testing" the Mark VII and other grids over many years. It is submitted that his activities come within the requirements of the *Animal Care and Protection Act 2001* and, consequently, the activity was not lawful apart from the *Nature Conservation Act*. It is submitted the subs 88(3) defence cannot be relied upon by the respondents.

**EXERCISE OF DISCRETION**

36. The exercise of the Court's discretion was addressed in the applicant's closing submissions at [41]-[45] and, again, these will not be repeated here. However, some matters need to be addressed in the light of the evidence discussed above.

37. The second respondents' admissions indicate that he has engaged in a deliberate and very serious offence against the Act in previous years. Accepting the vague and evasive nature of the second respondent's evidence, however generously his evidence is interpreted, on his evidence the electric grids have killed many thousands of flying foxes. On his figures, it seems likely that 20,000-40,000 flying foxes have been killed since the 1994 requirement for a damage mitigation permit to take flying foxes.

38. His admissions also indicate that the potential for large numbers of flying foxes to be killed, injured or harmed in the future if the grids are allowed to continue to operate. The second respondent himself stated that "as many as 56,000 flying foxes were on my Farm during" 2004 based on a counter placed on one grid.[21] The respondents' admissions clearly show the enormous potential for their electric grids to kill, injure or harm flying foxes. This is a deliberate and serious breach of the Act that the Court should restrain.

---

[21] Affidavit of Mervyn Thomas (4 July 2005), para 45. See also Transcript, p 225, lines 30-45 and p 229.

39. The difficulties in bringing this case and the second respondent's evasive evidence also indicate that if the Court accepts Dr Spencer's opinion that the Mark VII is likely to kill, injure or harm flying foxes, the Court should order the grids be dismantled subject to gaining approval from the Environmental Protection Agency (EPA) under the Act. If the grids remain in place it will be impossible for the applicant to monitor compliance with the Court's orders without trespassing on the land – something that she does not wish to do and the Court would not condone. The fact that the EPA can approve future operation of the grids under the Act also tells strongly in favour of granting the relief sought, including the order to dismantle the grids. The respondents are free to seek approval from the EPA in the future should they wish to and be able to comply with the EPA's requirements.

**Chris McGrath**
**Counsel for the Applicant**
**19 October 2007**

## Appendix 1: Electric grids and numbers of flying-foxes electrocuted at Edenvale lychee farm based on the affidavit and oral evidence of the second respondent

| Year | Types of electric grid | Flying fox numbers/problems | Numbers killed if numbers were "averages"[22] | Numbers killed if 10% of stated averages[23] | Comments |
|---|---|---|---|---|---|
| 1987 | 2 Fyre fox[24] | "very little flying fox invasion"[25]; about half of crop lost due to flying foxes.[26] | 30/night x 2 grids x 55 nights = **3300** | **330** | |
| 1988 | 2 Fyre fox[27] | About half of crop lost due to flying foxes.[28] | 30/night x 2 grids x 55 nights = **3300** | **330** | |
| 1989 | 2 Fyre fox[29] | About half of crop lost due to flying foxes.[30] | 30/night x 2 grids x 55 nights = **3300** | **330** | |
| 1990 | 2 Fyre fox[31] | About half of crop lost due to flying foxes.[32] | 30/night x 2 grids x 55 nights = **3300** | **330** | |
| 1991 | 2 Fyre fox[33] | | 30/night x 2 grids x 55 nights = **3300** | **330** | |
| 1992 | 5 Fyre fox[34] | Extensive flying-fox problems—"the attacks were quite dramatic"[35] | 30/night x 5 grids x 55 nights = **8250** | **825** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| 1993 | 6 Fyre fox[36] | Extensive flying-fox problems—"the attacks were quite dramatic"[37] | 30/night x 6 grids x 55 nights = **9900** | **990** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| 1994 | 7 Fyre fox[38] | | 30/night x 7 grids x 55 nights = **11,550** | **1155** | |
| 1995 | 9 Fyre fox[39] | | 30/night x 9 grids x 55 nights = **14,850** | **1485** | |
| 1996 | 9 Fyre fox[40] | "The losses were so great in '96, '97"[41] | 30/night x 9 grids x 55 nights = **14,850** | **1485** | A high level of flying fox presence would suggest that take was close to grid capacity. |

[22] Death rates for different grid versions taken from the affidavit of Mervyn Thomas (4 July 2005), paras 16, 17, 20, 23.

[23] During cross-examination on 14 September 2007, the second respondent disputed that the numbers of flying foxes killed on his grids stated in his affidavit as 'approximate' numbers represented an average or approximate number killed on each grid. He said they represented the maximum capacity of each grid. When asked what the actual numbers of flying foxes killed, Mervyn Thomas says the numbers based on figures in his affidavit over-estimated the numbers of bats killed on his grids: "This table that you've given me is out by a factor of 10, multiplied by 10." Transcript, p 199.

[24] Transcript, p 186.

[25] Affidavit of Mervyn Thomas (4 July 2005), paragraph 12.

[26] Cross examination of Mervyn Thomas 2005. When asked what percentage of his fruit crop he lost from 1987-1990, Mr Thomas said, "Probably half."

[27] Transcript, p 186.

[28] See footnote 26.

[29] Transcript, p 186.

[30] See footnote 26.

[31] Cross-examination of Mervyn Thomas, p. 186

[32] See footnote 26.

[33] Transcript, p 186

[34] Transcript, p 186

[35] Transcript, p 186, discussing flying-fox problems during the expansion of the orchard.

[36] Transcript, p 186

[37] Transcript, p 186, discussing flying-fox problems during the expansion of the orchard.

[38] Transcript, p 187.

[39] Transcript, p 187

| | | | | | |
|---|---|---|---|---|---|
| 1997 | 9 Fyre fox<br>1 MKIII[42] | "in 1997, we had lost approximately three-quarters of our lychee crop due to flying fox invasion"[43] | (30/night x 9 grids x 55 nights) + (5/night x 1 grid x 55 nights) = **15,125** | **1512** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| 1998 | 7 MKIII<br>3 MKIV[44] | | (5/night x 7 grids x 55 nights) + (4/night x 3 grids x 55 nights) = **2585** | **258** | |
| 1999 | 10 MKV[45] | No fruit due to rain.[46] | 3/night x 10 grids x 55 nights = **1650** | **165** | Assume no take. |
| 2000 | 10 MKV[47] | 40 tonne fruit loss (80% of crop) attributed to flying foxes.[48] | 3/night x 10 grids x 55 nights =**1650** | **165** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| 2001 | 8 MKV<br>2 MKVI[49] | 96 tonne fruit loss (96% of crop) attributed to flying foxes.[50] | (3/night x 8 grids x 55 nights) + (1.5/night x 2 grids x 55 nights) = **1485** | **148** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| 2002 | 8 MKV<br>2 MKVI[51] | No fruit due to drought.[52] | (3/night x 8 grids x 55 nights) + (1.5/night x 2 grids x 55 nights) =**1485** | **148** | Assume no take. |
| 2003 | 7 MKV<br>2 MKVI<br>1 MKVIIa[53] | 10 tonne fruit loss (100% of crop) attributed to flying foxes.[54] | (3/night x 7 grids x 55 nights) + (1.5/night x 2 grids x 55 nights) + 30[55] (MKVII) = **1350** | **135** | |
| 2004 | 7 MKV<br>2 MKVI<br>1 MKVIIb[56] | 80 tonne fruit loss (80% of crop) attributed to flying foxes.[57] 5,648 alleged flying fox contacts on 1 of 10 grids.[58] | (3/night x 7 grids x 55 nights) + (1.5/night x 2 grids x 55 nights) = **1320** | **132** | A high level of flying fox presence would suggest that take was close to grid capacity. |
| **TOTAL** | | | **102,550** | **10,255** | |

[40] Transcript, p 187
[41] Transcript, p 187
[42] Transcript, p 187
[43] Affidavit of Mervyn Thomas (4 July 2005) at paragraph 13
[44] Transcript, p 188
[45] Transcript, p 189
[46] Affidavit of Mervyn Thomas (4 July 2005), paragraph 62.
[47] Transcript, p 189
[48] Affidavit of Mervyn Thomas (4 July 2005), paragraph 62. Cross-examination of Mervyn Thomas 2005.
[49] Transcript, pp 190-91.
[50] Affidavit of Mervyn Thomas (4 July 2005), para 62. Cross-examination of Mervyn Thomas 2005.
[51] Transcript, p 191
[52] Affidavit of Mervyn Thomas (4 July 2005), paragraph 62
[53] Transcript, p 193
[54] Affidavit of Mervyn Thomas (4 July 2005), para 62. Cross-examination of Mervyn Thomas 2005.
[55] Transcript, p 194. Mr Thomas says 20-30 bats were killed on the first version of the MKVII.
[56] Transcript, p 193
[57] Affidavit of Mervyn Thomas (4 July 2005), para 62. Cross-examination of Mervyn Thomas 2005.
[58] Affidavit of Mervyn Thomas (4 July 2005), para 44.