

TRANSCRIPT OF PROCEEDINGS

O/N 2428

FEDERAL COURT OF AUSTRALIA

TASMANIA DISTRICT REGISTRY

MARSHALL J

No TAD 17 of 2005

ROBERT BROWN

and

FORESTRY TASMANIA and OTHERS

HOBART

9.30 AM, FRIDAY, 16 DECEMBER 2005

Continued from 15.12.05

DAY NINE

MS D. MORTIMER SC appears for the applicant,

with MR P. TREE SC and MR T. MITCHELL

MR D. GUNSON SC appears for first respondent, Forestry Tasmania,

with MR A. ABBOTT and MR C. GUNSON

MR N. O'BRYAN SC appears for the Commonwealth,

with MR A. BROADFOOT

MR P. TURNER appears for the State of Tasmania,

with MR M. DIXON

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<CROSS-EXAMINATION BY MR D. GUNSON

5

HIS HONOUR: Mr Gunson?

10 MR D. GUNSON: Thank you, your Honour.

Mr Kennedy, when you were instructed by FitzGerald and Browne in this matter you were provided with a DVD CD containing file folders, were you not?---Containing file folders?

15 Yes?---Yes, I think so. Yes.

Well, do you wish to refresh your memory?---Sure, sorry.

20 If you go to page 377 you will find your affidavit there and you will find exhibited to your affidavit is the first exhibit, a letter of instruction from FitzGerald and Browne of 4 October 2005. Do you have that?---Yes.

If you turn to the second last page of that letter you will see there is a schedule of enclosures. Do you see that?---Yes.

25

You were given a DVD CD containing file folders, one entitled B. Brown v FT Data Wielangta Only, B. Brown v FT State Data All FT Land in Tasmania and DPIWE Subpoena Information. Do you have that?---Yes.

30 Have you read it?---Yes.

You were provided with that CD DVD?---Yes.

35 What did you do with it?---As I said yesterday I put it on to my hard drive.

And that is the hard drive that is in evidence here now?---Yes.

All right. Did you copy it to anybody else?---No.

40 And you haven't maintained your own copy?---No, absolutely not.

45 All right. Thank you. Your Honour, with respect to the hard drive, I have an application to make on behalf of the respondent for leave to take up that exhibit during the course of the adjournment in this trial to enable it to be read and copied if necessary.

HIS HONOUR: Any objections?

MS MORTIMER: My understanding is, your Honour, it has a lot of other material on it and I want to get some instructions from Mr Kennedy about that and I also want to get some instructions generally about that application so if we could deal with it a little later.

5

HIS HONOUR: Yes. Does that suit you, Mr Gunson?

MR D. GUNSON: To defer it to later is quite suitable, your Honour, but it is a matter that we should flag for later in the day.

10

HIS HONOUR: Yes. Thank you.

MS MORTIMER: And it might be helpful if my learned friend could outline the purpose, whether it is - well, the purpose of it, your Honour, and then that would enable me to get my instructions.

15

MR D. GUNSON: The purpose of it, your Honour, is that it is now an exhibit in this trial. In its present form just sitting here it is unintelligible. We don't know what is on it. It has been tendered in toto and we would like to have the opportunity to see what is on it. I mean by tendering presumably the intention was to invite your Honour at some stage to look at it.

20

MS MORTIMER: Absolutely not, your Honour. The purpose of tendering it was that that was a condition of my instructors undertaking.

25

HIS HONOUR: As to confidentiality?

MS MORTIMER: Absolutely. That is why it has been tendered.

30

MR D. GUNSON: Well, if it is tendered solely on that basis that is one issue. I don't know what else is to be made of it but it is now an exhibit in the hands of the Court and we would like to see what is on it.

HIS HONOUR: Right. Well, Ms Mortimer is going to take some instructions about that and we will deal with that later in the day.

35

MS MORTIMER: Thank you, your Honour.

MR D. GUNSON: Thank you.

40

Do you have in front of you a copy of the affidavit of Dr Shields?---Yes. In book 5?

Book 5?---Yes.

45

And if you turn please to paragraph 65, sorry 66 of that affidavit?---I need the page number again sorry.

Page 2520. In this paragraph Dr Shields deals with the question of availability of trees with suitable hollows under the heading Is it Really the Case that the Availability of Trees with Suitable Hollows is a Limiting Factor for Swift Parrots. In paragraph 66 he says:

5

A key attribute of the arguments of both Brown and Kennedy is that the loss of a given area of mature forest through timber harvesting will result in a proportional reduction in breeding populations of swift parrot.

10

And that of course is your argument, isn't it?---It depends on where the area of mature forest is and it may not be proportional reduction in the population of the swift parrot. In the case of a high density nesting colony it may be proportionally higher than the area of forest overall or in another area it may be proportionally lower so yes, we are not stating - I don't know what Peter Brown's affidavit said but mine certainly wasn't stating that as such.

15

He continues:

20

This assumes that hollows of the primary limiting resource and that every hollow bearing tree that is lost will lead to a decline in nesting swift parrots. I have not seen any signs to support this contention and discussed the matter elsewhere in this affidavit. To summarise in relation to the points in Brown I note the following.

25

And these are still relevant as far as you are concerned.

30

First, in a study of tree hollow occupancy by birds in dry sclerophyll forests in the pioneer research area in north-east Tasmania, Taylor and Hasler concluded that "Hollows are not limiting to the bird populations in the area and may well be many times in excess of requirements."

35

Would you agree with that as a general observation?---They may have observed that in their study but, as I said earlier yesterday, not all visible hollows are suitable hollows so given that fact you are likely to see more hollows than hollow nesting animals. The other issue there is in paragraph 68 I note that they - a maximum of .4 hollow bearing trees per hectare would be required to support the hollow breeding birds in their study and they may well have observed that in their area but from what I have seen swift parrots occur at much higher densities than - swift parrot nests probably occur at that sort of density and would probably require many more hollow bearing trees per hectare than that.

40

Dr Shields finishes off that paragraph, that is paragraph 67, by saying:

45

Since swift parrot breeding numbers vary greatly from year to year hollows are clearly not a limiting factor in years when numbers are below their historical maximum.

5 Would you agree with that as a proposition?---In particular sites that may be true but the numbers in a particular area where you still have a high density of large trees and still have the quality habitat the birds still may be able to nest at their historical maximum in that particular spot, in that particular site, in my opinion.

10 He then addresses in paragraph 68 the study in the Pioneer area by Taylor and Hasler and says:

They further estimated that a maximum of 0.4 hollow bearing trees per hectare would be required to support the hollow breeding birds, that is, all species observed in their study.

15 Have you read the study by Taylor and Hasler to which Dr Shields refers?---I did read it, it would have been a few years ago, though, I remember reading it just out of interest when I was undertaking another study.

20 He continues:

The main concern that the authors raised was whether stream-side reserves would provide comparable habitat even if the trees therein did have the requisite number of hollows.

25 And Dr Shields makes the observation that:

Since that time the provision of wildlife habitat clumps has become mandatory through the Forest Practice Code obviating the need to rely totally on stream-side reserves for all hollows.

30 He says:

35 *The point of all this for swift parrots in Wielangta is that even if the abundance of hollow-bearing trees decreases substantially in harvest coupes this need not and probably would not result in a decrease in the breeding capacity for swift parrots.*

Do you agree with that comment?---No, no, I don't.

40 Totally disagree with it?---What's that, sorry?

Do you totally disagree with it or agree with it in part?---Yes, well, I suppose I disagree with it in part.

45 What part do you disagree with?---I disagree with the terminology "probably not result in a decrease in the breeding capacity for swift parrots" in that the density of swift parrot nests, which is something that Dr Shields still isn't aware of, would require a much higher retention of hollow-bearing trees than has been

retained in WT17E and is likely to be in 19D. Now, the wildlife habitat clumps, that's a total area of perhaps a hectare I would suggest in WT17E or perhaps half a hectare, I'm not sure, and the other retained areas, again, you might be looking at 30 per cent left and maybe 20 per cent of the large trees. Given the
5 potential for high density of swift parrot nests, I don't believe that they'll be able to squeeze into those remaining areas and hence that would result in a decrease in the breeding capacity for the birds.

10 You can't say it would decrease it might decrease?---It's likely to, that would be the terminology.

You don't really know though, do you, at the end of the day?---Well, I think it's likely. If I could just refer to a map that I've got in my affidavit?

15 Certainly?---Page 418 in book 1.

20 Yes?---If you look at the five most northerly nests on that map, WT17E, which we probably all recognise the shape of by now, is in between those maps. Now, what I'm contending is that there are very likely to have been swift parrot nests between the three nests found on the left and the two on the right given the presence of swift parrot activity in some of those areas and I would also add that WT19D as I understand it wasn't fully searched. So a lot of the questions pertaining to these particular areas - I was just referring to this map to explain my basis contending that swift parrot nests were likely to be in both of those
25 coupes given the presence of similar habitat in those coupes and the areas where the nests were actually found.

30 But at the end of the day it comes back to this proposition that you simply don't know?---I don't know for sure, I'm just saying it's very likely.

Thank you. And Dr Shields concludes by saying:

35 *I don't often support the argument that the birds "can just go somewhere else" but for the swift parrots in the Wielangta coupes I believe it is likely to be the case. Whether somewhere else is automatically less optimal habitat is unclear. If there really is such a surfeit of hollows then it need not be any less optimal.*

40 A plain fact of life again is that they are going to go somewhere else, aren't they, they must as a matter of necessity?---Well, they must but we don't know whether the breeding success will be as high in the areas where they have to move to as to where they are at the moment.

45 Yes. Just excuse me. Are you familiar with the area known as the Three Thumbs Reserve?---Yes, I am.

Have you been there?---Yes, I did, in 1999.

And did you look for swift parrots there?---I would've, I mean, yes.

Well, I would have yes, which is the answer?---Okay, yes.

5 You remember doing that?---I remember a site called the Three Thumbs and going there, yes.

HIS HONOUR: Do you remember going to it?---Not specifically, I couldn't recall any particular event from there or the day.

10

MR D. GUNSON: Do you remember finding parrot nests in the Three Thumbs State Reserve?---No, I don't remember.

15 And the Three Thumbs State Reserve is a much larger reserve than the Wielangta area?---A much larger reserve than the Wielangta area?

Sorry, I put that poorly. Much larger than the Wielangta Forest Reserve?---It is, but it is in my understanding a dry habitat type than the Wielangta area.

20 That is your understanding of it, is it?---Well, from the vegetation and that.

Well, you didn't find swift parrots in 1999 in the Three Thumbs State Reserve?---No. Not that I can remember.

25 And - well, if you had found them they would have been recorded?---Yes, they would have.

Either - - -?---So, no.

30 Either foraging or nesting?---Yes. Well, it could have been neither. I mean, we could have seen a flock fly over, or something, and recorded that.

But you really have no memory now at all of seeing parrots in that State Reserve?---Not in amongst all the other sites that we went to, no.

35

Thank you. Now, are you familiar with the parrots described by Dr Shields in paragraph 69?---Yes, I am. I actually - I studied one of those parrots. I actually undertook surveys for the regent parrot in northern Victoria in the year 2000, so, yes, I am familiar with - I have seen both of them.

40

Are you familiar with the study to which Dr Shields refers, that is, Burbridge 1983?---No.

45 Thank you. Would you agree with the final sentence in that paragraph where he says:

The nesting resource for swift parrots could be expected to reveal the same pattern, given the similar relationship between nesting and foraging habits described in the swift parrot recovery program 2001.

5 ?---I don't know whether numbers of hollows are distributed evenly throughout eastern Tasmania, so I can't say.

What is your understanding of adaptive management? How would you describe it?---Adaptive management is - in my understanding it's where you assess the
10 success of particular management prescriptions, and review those in the light of new information on the success of those prescriptions, and update them, I would imagine. Hence that's the adaptation.

15 And adapt your management practices accordingly - - -?---Yes.

- - - as new information comes to hand?---Yes.

All right. Thank you for that. Now, if you could have a look, please, at volume
20 4. Have you got volume 4 there? If you would first turn, please, to page 1389.

What you have before you is an affidavit by Michael Kenneth Miller, sworn on
21 November of this year, and Mr Miller was the planning co-ordinator for Derwent District Forestry Tasmania. If you could then turn to page 1401, please. Do you have that?---Yes.

25 And there was a heading Strategic Management of Potential Swift Parrot Nesting Habitat in the Wielangta State Forest. I would like to ask you some questions based on what Mr Miller says. He says in general terms that there were surveys in 2001 and 2002, and as a result of those surveys the importance of sections of Wielangta for swift parrot nesting habitat was recognised. He
30 says in Spring 2001 a Forestry employee observed high numbers of swift parrots in Wielangta, near coupe 42D. Do you know where 42D is?---I know it's in the south of the forest.

35 All right. He then says:

An observation of high swift parrot activity in this coupe in October 2001 resulted in a notification, and a subsequent reply from Ray Brereton at DIPWE -

40 and he has exhibited that. He says this event, he believes, was the catalyst for the November 2001 strategic swift parrot survey by David James. He then says:

45 *In November of that year David James, a consultant for DIPWE, surveyed five locations in Wielangta for the swift parrot breeding habitat, Mount Walter, Mount Jacob, Cone Hill, Wielangta Hill and Mount Reuben.*

Having been into the area, and considered the maps of the area, are you familiar with all of those places that he has identified?--I know the Mount Walter, Mount Jacob and Cone Hill - I know Mount Walter and Jacob and Reuben I think are in the south. I'm not sure where Cone Hill is.

5

All right?--I know where Wielangta Hill is obviously.

All right. He said:

10

Eight new nest sites and seven locations of juvenile activity were identified. In addition, areas of high quality swift parrot nesting habitat were also identified, which were presented as part of a report.

15

Have you seen the reports to which he refers, which are exhibited as exhibits 19 and 20?--Where are they?

If you turn, please, first to page 1510?--Yes. Well, I've seen the one on 1510

20

You have seen that before?--Yes.

Can you say - - -?--That's - sorry.

25

When did you see that swift parrot habitat survey?--That came with either the first or second batch of materials from FitzGerald and Browne.

30

Thank you. He then goes on and says that in December of that year there was a meeting between himself and Angela Illapopoulos of the Forest Tasmania Derwent District, Sara Munks, Peter Brown. They discussed the outcome of David James' report. It was agreed that nominated areas of high swift parrot breeding activity, marked as green on the survey map, would be excluded from future operations. Quite a reasonable step to take, that is, to exclude the high breeding area from operations?--Well, the step that needed to be taken to ensure the species was protected was to ensure that the surveys were adequate to determine the extent of the nesting populations. And I don't believe that they were within that setting out the areas of breeding activity. That's the best step that they could have taken with the information they had. I just don't think they had sufficient information with which to ensure the protection of the species in the area.

35

40

But surely the information they had indicated where the birds were, where they were foraging and where they were nesting?--It indicated some of the places where they were and where they were nesting.

45

Have you spoken to any of the participants in that survey? That is to determine how efficient their survey was?--I have spoken to David James about it, yes.

And when did you speak to David James about it?--I spoke to him about it when I was at Wielangta with him and I asked him, you know, do you think that

your survey was enough to determine the extent of the nesting areas, or were you just looking at determining whether nesting was happening at a broader level.

5 Is he the only participant in that survey to whom you spoke?---Well, he was the only one who actually went out to see the birds as far as I know, but no I haven't spoken to - - -

10 But it was a reasonable step to exclude the area from future operations wasn't it?---Yes, it was. I'm just saying it wasn't necessarily sufficient in light of the amount of information that they had, but they did what they could I accept that.

Thank you. He then says:

15 *Following the meeting Forestry Tasmania internal correspondence shows that the Forestry Tasmania Derwent District supported a different approach.*

And there is an exhibit to that effect:

20 *The green areas marked on the survey map would not be placed in the management decision classification system as protection forest but they would be identified as special management zones for swift parrot until further information and a formal swift parrot management plan could be developed.*

25 Again, reasonable steps to take, I would suggest?---Probably - possibly not. It depends on what happens within those special management zones. Excluding them from future operations as in paragraph 44 appears to me to be a precautionary step, whereas in 45 it really depends on how those special management zones were actually managed in my opinion, as to whether that step was a reasonable step or not.

30 And you really don't know how they were managed?---Not in each case, no.

35 He says then that:

40 *t would be expected that the presence of a swift parrot special management zone within close proximity to any planned operation would require the forest planner to both consult with the Threatened Fauna adviser for swift parrot recommendations and develop prescriptions in consultation with the Forest Practices Board senior ecologist.*

45 You would accept that that is a reasonable response to take?---Yes.

He then says:

5 *On 23 December 2001 the district received a reply in relation to coupe 13D as a result of a notification sent to the Forest Practices Board prior to the 2001 survey. The following is recommended: Areas identified of high swift parrot breeding activity in accordance with James 2001 in adjacent coupes 13B and 12D were to be excluded from any future operations.*

10 And you would accept that that was a responsible step to take?---Yes, I suppose it depends on how well those two coupes were surveyed, but obviously David would be able to answer that.

15 But they were to be excluded from any future operations?---Areas of high breeding activity, yes, but if the whole coupe wasn't searched then obviously you may miss areas that do have activity that weren't located.

 But those two coupes were to be excluded for the reasons expressed; isn't that clear?

20 MS MORTIMER: Well, your Honour, that is not a fair representation in my submission of what that first dot point says, if that is the matter to which my learned friend is directing the witness' attention.

 HIS HONOUR: Mr Gunson?

25 MR D. GUNSON: I will put it another way.

 Do you accept that to proceed on the basis of that recommendation was appropriate?

30 MS MORTIMER: Well, your Honour, again there are two recommendations there, there are two bullet points. If my - - -

 MR D. GUNSON: I am only dealing with the first one.

35 HIS HONOUR: Yes, as I understand that is correct.

40 MR D. GUNSON: Just confine yourself to the first bullet point please?---Yes, it depends on the adequacy of the surveys in those two coupes. From the reading of it I'm not sure whether they've excluded the coupes in total or parts of them.

45 HIS HONOUR: What is meant by high swift parrot breeding activity? What does the adjective do?---I'm not really sure in this case. I had the impression, my interpretation of it was that there were - obviously there were some swift parrot nests in the area and there would have been other swift parrots moving around. And as I understand it David saw more swift parrots than the actual nests that he found which strongly suggests that there are other parrots around

and what he has probably done there is, I think, outlined the areas where there were birds flying backwards and forwards and moving around.

5 MR D. GUNSON: Now, to come back to the proposition I think I put to you that you still haven't responded to: Do you accept that that is a reasonable step to take?---It depends on the adequacy of the surveys in those coupes.

10 And would you respond in the same manner to the second bullet point, that it depends on the adequacy of the survey?---Yes, certainly in the immediate areas they've been - you know, the area along the northern boundary then that is a reasonable step to take. I just want to be certain that adequate survey was taken of the whole coupe, that is all.

15 If you look at paragraph 47 Mr Miller continues:

If the above recommendations were met 13D could be selectively harvested provided that -

20 First bullet point:

The size of the wildlife habitat coupes were increased in size. That is each clump should contain four to six mature trees with suitable swift parrot nesting hollows and marked in conjunction with the swift parrot specialist.

25 Do you accept that that was a reasonable response?---I don't think that that response would necessarily achieve the protection of the species in that area. And by protect I mean the maintenance of the population at its current level as outlined in the affidavit. What this step would do is allow for some mitigation of the impact, but the severity of the impact depends on the area of potential swift parrot habitat that was lost and without knowing that I can't really answer the question.

30 If you now go to paragraph 52 please, that is the bottom of page 1403, and he deals with coupes 12B and 13B and he says:

35 *The final fauna natural and cultural evaluation sheets completed for 12B on 8 August and 13B on 26 July indicated that no suitable swift parrot foraging habitat was present. In addition, based on the*
40 *described wet forest vegetation types I assume these areas were deemed unlikely to support swift parrot nesting habitat.*

45 Now, that is a reasonable assumption for him to draw. Would you agree with that?---Whether I'd agree with him depends on the vegetation types present in those coupes.

And you would need to know the precise nature of the vegetation?---I'd certainly need to know broadly what the dominant eucalypt species were in the site.

5 And that would be the determinant as far as you were concerned as to whether that was a correct approach by Mr Miller?---Well, it would probably be the same as - I would be looking to see whether it falls within the vegetation communities and the tree species that we know to be swift parrot nesting habitat and then I would probably take Mark Wapstra's advice in that the forest
10 structure of the over-storey needs to be investigated on the ground.

If I could take you then please to paragraph 53 where he deals with coupe 13D.
He says:

15 *Operational planning for this coupe commenced prior to the report by James in 2001.*

He said:

20 *In response to the identification of high quality swift parrot nesting habitat operational planning for that coupe was reviewed take this into account.*

And he says that:

25 *On 23 December 2001 the district received a reply in relation to 13D as a result of notification sent to the Forest Practices Board with the following recommendation.*

30 First bullet point:

Areas identified of high swift parrot breeding activity in accordance with James and adjacent coupes 13B and 12D were to be excluded. Many future operations.

35 Again you would answer that presumably the same way that you answered the earlier - - -?---Sure.

And the same with the second bullet point, is that right?---Yes.

40 With those small caveats?---That's the same as 46, yes.

And I imagine similarly with 55 you would approach it in the same way. Is that correct?---Yes.

45 MS MORTIMER: Your Honour, can I just clarify, my reading of that is that those are repetitions of paragraph 46 and 47, are they not?

HIS HONOUR: It certainly seems that way, doesn't it?

MR D. GUNSON: Yes.

5 HIS HONOUR: Nothing exceeds like excess.

MR D. GUNSON: Just bear with me for one moment, Mr Kennedy.

10 HIS HONOUR: I don't think it is Mr Gunson's fault. I think it is the fault of whoever compiled the statement.

MS MORTIMER: No, I understand that, your Honour. I just wanted to clarify it, that is all.

15 MR D. GUNSON: I think I have nearly finished I just want to double-check something, your Honour.

20 Are you aware of the overall general history of logging in Wielangta forest?---I have some awareness of it but certainly I would understand that there would be people who have a better knowledge than me, a more intimate knowledge.

25 Are you are that the Wielangta forest started to be cleared probably well over 120, 130 years ago?---Yes, certainly, but I am also aware that some areas were overlooked, namely those areas of stringy bark forest in the far north where there is still nesting sites.

Yes, but in general terms that area we generally call Wielangta has been logged for any years?---Absolutely.

30 And as you drive into the Wielangta area particularly from the Orford end, from the north, you will see a number of pastures obviously for farms?---In the lowland valleys, yes, that's right.

35 And are you aware that 17E had been selectively logged in about the 1940s?---I wasn't aware that it was the 1940 but I was aware - I did locate a couple of old stumps in there so I was aware - - -

40 With shoes in them - the holes where they used to put the boards?---Yes, that's right. So it was selective logging for, I presume sawlogs in those days so that preceded the days of wood chipping and clear felling but yes.

HIS HONOUR: We saw those on the view?---You did?

45 Yes?---Right. Okay. And I certainly saw a couple

MR D. GUNSON: I have no further questions, your Honour.

HIS HONOUR: Ms Mortimer?

5

MS MORTIMER: Mr Kennedy, you were asked some questions yesterday morning at the start of your cross-examination about the nesting habitats of swift parrots, and you gave some answers along the lines that they nest where they are foraging, depending on the availability of nesting sites. And there are areas where the birds will forage that aren't - and that some of those might not be breeding birds. But can I direct your attention back to that answer you gave about how they may nest near where they are foraging, and ask you to think of the Wielangta State Forest area. How far away in your opinion could birds who are nesting in that area forage?--In my opinion they could be flying down to the Rheban - there's a place called Rheban in the low lands to the north east of Wielangta. That distance I think is probably about eight kilometres. I think I said five to 10 yesterday.

10

15

20

And based on what you know about the bird, how long would it take the bird to fly that distance?--Not long at all, probably six minutes, six or seven minutes.

25

Now, you were asked some questions about the banding program in relation to swift parrots. Your Honour, I will try and get the transcript references now, if I can. That is at page 588 about line 23. And I think you gave an answer that an individual called Raymond Gartrell undertook this?--No, it was Brett Gartrell.

30

Brett Gartrell, sorry. And what was the - when was that program, to your knowledge?--I don't know the specific start and end dates, but I assisted him in 1999 and 2000.

35

And the purpose of it?--I think what he was hoping to do was capture and recapture individual birds, and assess their condition. I think he was - what he was trying to do was assess the health and the breeding capabilities of those birds. So by getting a capture and a recapture he may have - he might get a record in one week, and then another three weeks later, and he can see whether it's improving or deteriorating. But I must admit he went to New Zealand. I lost contact with him, and I don't know what actually came out of the study. And I don't know all of the things that he was hoping to do from the study either.

40

Are you aware of whether there were any problems with banding of swift parrots?--Not that I know of.

45

Now, you were asked some questions, or a lot of questions about flowering patterns of blue gums, and where the parrots may or may not have been breeding, and one of the answers you gave was that you got some additional information from Mark Holsworth - oh, I withdraw that. That you got some

additional information about where they had been this year. Was that information from Mark Holsworth - - -?---Yes.

- - - or from someone else?---For this year? Yes. Yes, it was Mark Holsworth.

5

Now, in answer to a question by my learned friend you - this is page 618 of the transcript, your Honour - about nest surveys, I think you gave some evidence that there had been some done in August this year that had found about between 400 and 600 swift parrots. Can you just explain to his Honour how those nest surveys are done, and who they are done by?---These are on the mainland surveys?

10

Yes?---So their foraging habitats?

15

Sorry, not nest surveys?---Yes. The surveys are conducted as part of a major volunteer effort, where an initiative - a Federal Government funded, and I think an NHT funded initiative called the Threatened Birds Network, makes a call for volunteers to go out and look for swift parrots on the one weekend. And they go out to - and pretty much cover all the sites where swift parrots have ever been seen before, and look for new potential areas, and survey those for the birds.

20

And who co-ordinates it?---It's - the swift parrot, there is a mainland swift parrot project officer who co-ordinates it. That was me for four years, and it's now Debbie Saunders in Queanbeyan.

25

And are the results published?---They're published in - the most recent results were in a newsletter that goes out once a year to all the volunteers and to other people who might be interested in the results, yes.

30

And based on your knowledge and experience, Mr Kennedy, do you have an explanation about why only between 400 and 600 parrots were spotted?---This year I noted that, and spoke to Kris Zaros, who's the Victorian co-ordinator of the surveys, and he suggests that the lower numbers may be that the birds are in smaller flocks, and when they're in smaller flocks they may be quieter than when these big groups - sometimes you get a bigger result because if, you know, five or 600 are all in the one spot then it's obviously a bit easier to count them, but he wasn't sure of that, that's just a - you know, it's a possibility.

35

Do you know how that compares with the results of the surveys from 2004?---From memory it's lower than 2004.

40

Now, you were asked some questions about wildlife habitat clumps, page 624, your Honour.

45

And one of the answers you gave was that at line 12 you say that:

I think their aim is to ensure that understorey species and the like can move back and recolonise the rest of the forest.

5 What understorey species did you have in mind when you gave that answer?---I was thinking of plants, so understorey wattles and orchids and things like that, daisy bushes.

10 Now, you were asked some questions about Mr Wapstra's affidavit and you were asked what you knew - what documents you had seen in relation to the 2002 review of swift parrot nests in Wielangta?---Yes.

And can I ask you - can Mr Kennedy be shown please Court book 4, page 1501?---Yes.

15 Now, have you seen that document before?---Yes, I have.

20 Is that the report that you were referring to when you gave an answer to Mr Gunson that you had seen something about that survey?---Yes, as far as I knew that was the only thing that was available.

25 Now, page 635 of the transcript, about line 13 you were asked some questions by Mr Gunson about the Community Forest Agreement and whether you agreed or disagreed about the benefits of the land that had been added by way of formal and informal reserves. And your answer was this:

Yes, there's further land but it certainly overlooked most of the old growth string bark forests and I can refer, your Honour, to a map to show that.

30 What map did you have in mind?---The map I had in mind was one attached to the affidavit. I think it was the same map we were looking at before.

HIS HONOUR: Your affidavit?---My affidavit.

35 Is that - - -?---Hang on, no that doesn't show - - -

40 418?---Yes, well 418, I did look at the vegetation classes to the north of that site, I was thinking that this map was a bit more zoomed out if you like, to show the area of the reserve which is to the north of the couped up area of State forest. Now, the couped up areas of the State forest is obviously the black outline and what you can see is that where that brown is stringy bark habitat, the light brown. There is light brown and dark brown and dark brown is tall stringy bark forest and light brown is dry stringy bark forest.

45 Tall obliqua is string bark?---Yes, obliqua. Yes. Whereas the area to the north is pulchella, globulus, viminalis dry forest. And as you can see basically the northern boundary of the couped up State forest is the beginning of that reserve edition, in my understanding. And what it suggests - what I can see there is

5 where the stringy bark forest ends, the reserve starts and in my opinion the stringy bark forests, looking at the records that exist already for the Wielangta area, is clearly a preferred nesting type in that area as opposed to the pulchella forests. Now, I certainly acknowledge that swift parrots will use that species, but it doesn't appear that they use it to the same extent as the stringy bark forests where the two grow together.

10 MS MORTIMER: All right. Thanks, Mr Kennedy. Just pardon me a moment, your Honour.

You were asked some questions about some of the recommendations that have been made in relation to the swift parrot that, I think, are found in Mr Wapstra's affidavit. And your Honour transcript page 637 at about line 11.

15 You were asked this question, Mr Kennedy, I will just refresh your memory:

20 *If you go to the third recommendation which is for known nest sites within 500 metres of operation - and by operation it means forestry operation - and the recommendation is known nest sites should be protected in undisturbed patches of forests.*

And you were asked whether you agreed with that or not. And your answer was:

25 *Yes, the size of the undisturbed patch of forest depends on how big that is, whether I would agree or disagree with that.*

30 Now, in relation to the protection of known nest sites what size of undisturbed patches of forest in your opinion ought be set aside?---In my opinion - well, it depends on the nature of the habitat but if the habitat's quality is the same - well, certainly you want a buffer around the actual main nest from a disturbance point of view, but if the habitat quality is the same, I would probably, to be safe, probably 500 metres, yes, around a main nest site with similar quality habitat around the nest.

35 The purpose of that being what?---Just to ensure that - there's knowledge that swift parrots tend not to nest near significant areas of cleared land by and large, it's just ensuring that the birds aren't disturbed by major habitat loss and it's probably I think a safeguard to ensure that the birds - how do I put this? The survey effort has to be adequate and that's an absolutely key thing and that has to be done to ensure that the birds are adequately protected, but even with that a 500-metre buffer just ensure that you catch other nests that aren't known. But I'd have to think more about that, I mean, on the grounds as to what area of undisturbed habitat's required around a nest.

45 When you say you have to think more about that on the ground what - - -?---More observations of the birds nesting and more discussions with people who have observed the nesting.

How effectively can that kind of planning be done from a desk in an office?---Oh, well, you couldn't, you'd have to go out into the field and just watch the birds. Just watch their behaviour and look at their existing nesting sites and their context in the landscape.

Now, you were asked some questions about density - well, about the Roberts Hill area and you gave some evidence about the previous state of knowledge about Roberts Hill, and as I understood the difference you saw with the present state of knowledge. Can Mr Kennedy be shown exhibit LE7, please, that is the habitat map produced by Mr Ellis? I want direct your attention to the Bruny Island part of that map and to the Roberts Hill area?---Yes.

And ask you this question. This is a map obviously drawn before any of the results of what has happened - what has been discovered this year has been identified. Are you able to identify from this map and or from your own map approximately how many nests previously were known to exist in that area?---I can't say for sure, it might be 10 or so for that whole - between eight and 10.

And that number is consistent with your previous understanding of the records?---Yes, as far as I knew, including one that I saw when I was there, yes.

Now, as I understood your evidence in cross-examination it was that more than 40 nests have been discovered there this year?---Yes, I think it was 41.

How - based on your knowledge and experience - do you assess that difference in numbers? Do you assess that as a very significant difference and if so what does it say to you?---Well, it's a significant difference certainly and what it says to me is that - what it purely reflects is the amount of survey effort undertaken. Now, the one nest I found in 1999, I searched just a small area in the northern part looking to create a monitoring site. I found a nest, I was there for maybe a couple of hours, or two of us were, and then we left to go to the next monitoring site and we thought well, this area is obviously a nesting site for swift parrots because there are other individuals in the area. What's happened this year is it's a nesting site, let's work out the extent of the nesting site, and my understanding is that they were there for four or five days and that there were three of them and to me it just purely reflects that difference in effort.

Mr Kennedy, can you now have book 5 in front of you, which has got Mr Shields affidavit in it, and you were asked some questions about paragraph 38D of Mr Shields' affidavit and in particular you were asked by my learned friend in relation to 38D and the statement by Mr Shields that the list he then reproduces attempts to rank possible forestry activities from most negative to most positive for swift parrot conservation?---Yes.

Can I just ask you to look at (i) first, Conversion of High Quality Breeding Habitat to Exotic Plantations? Are you aware of any swift parrot nesting

habitat that is being affected by that activity?---No, I'm certainly not aware of any at the moment.

5 If you look at the second one, conversion - and I will ask you to read that as also including the words "of high quality breeding habitat to eucalypt plantation." Are you aware of any activities where that is being undertaken in relation to swift parrot breeding or nesting habitat?---Not currently, no.

10 And then the third one that Mr Shields ranks is, "Maximum use short rotation silviculture less than 80 years." In your opinion is that what is happening at Wielangta?---It depends - yes, well I'm assuming by maximum use he's talking about if he means 100 per cent clear felling of the coupe then that's not what is happening. As for the rotation silviculture I'm not sure what's planned, so I can't answer that. Yes, I'm not sure of the rotations.

15 Well, where - based on your knowledge of what is happening in the Wielangta State Forest, which of those roman numerals would you say what is happening at Wielangta fits into?---I'd probably say it is roman numeral number five, yes, (v). So it's a harvest, it has prescriptions and - actually, yes, well I don't know
20 of the rotation - - -

25 So if the rotation was less than 80 years which of those categories would Wielangta best fit into?---You'd need another point because it doesn't fit into any of them, because the rotation length is not right in (v) and maximum use short rotation isn't quite right either.

30 So where would the point go in terms of your priority?---It would go between (iv) and (v) the short rotation would be more negative than a longer rotation. So it is better than no prescriptions - actually that's hard is because you're weighing up between (iv) and (v). (iv) has no prescriptions and a long rotation length, whereas what's happening is there is prescriptions but it's a short rotation length. I couldn't really weigh up which is going to be more negative out of those two. I need them all spelt out and in which case it would be the more
35 negative would be no prescriptions, short rotation length and a long rotation and no prescriptions and some prescriptions and a short rotation length, I would have difficulty ranking those. And then below that as slightly more positive prescription with a long rotation, I think.

40 And how in deciding even within those rankings does the quality of the breeding habitat affect your judgment?---Sorry, I will have to - you will have to ask me that again?

45 When you were trying to undertake that ranking process, working with whether there are prescriptions or no prescriptions, what the rotation rate is, what kind of harvest operation it is, how do you or do you factor in the quality of the breeding habitat that you are dealing with?---Well, you do factor in the quality of the breeding habitat.

Well, where does that come in terms of how you decide what kind of forestry activities are most negative or most positive for this species? How does the quality of the breeding habitat affect that?---I don't know that it does. I think if its breeding habitat for a swift parrot then its quality breeding habitat, if that makes sense.

Well, I might just get you to explain that answer. Do you mean that there is - wherever the parrot nests you ought to take that as high quality breeding habitat, or do you mean something else?---Yes, that's more or less what I mean, taking into - I know that there's the occasional aberration of birds nesting in parks and things like that, but where they're nesting in native habitat the next thing to do is determine the number of nests in that area by undertaking adequate surveys, but in and of itself that would be a quality breeding habitat. Now, what I mean by high quality breeding habitat is a site that can support particularly high densities of birds and that comes down to the density of large trees with hollow. Or densities of hollows, I guess then to bring it to a knife edge, that's what it's about. So Roberts Hill has high densities of hollows, it's had some selective logging in the past, but not very much at all and this site at Wielangta that we're talking about here although some areas in 17E have been selective logged, 19D hasn't been logged at all and they have high densities of hollows and can support particularly large communities of swift parrot nests, when there's food. So, yes, that's what I mean by high quality.

Now, in answer to some questions by my learned friend about Mr Miller's affidavit, particularly paragraph 47. So that is in book 4, Mr Kennedy. Asking about these recommendations that were made in relation to coupe WT013D and one of the answers you gave in relation to paragraph 47 was that you didn't think that this response would achieve protection. And then you said that you meant by that the maintenance of the population at current levels. I want you to assume, Mr Kennedy, that the concept of protection includes recovery of populations as well. I want you to make that assumption for the purpose of answering this question?---Yes, okay.

The steps that Mr Miller outlines in relation to individual coupes from paragraph 41 onwards in his affidavit, I think from about paragraph 65. If you make that assumption about the concept of protection, are those steps capable of achieving recovery of populations?---No.

What do you need to do to achieve recovery of parrot population?---Well, firstly you need to ensure that you survey the sites to ensure that you're finding - you're working out the extent of swift parrot nesting habitats, which I don't believe has been done in this case. And with the highest quality swift parrot nesting habitats as we've done in the foraging habitats, I would suggest protection of those habitats by conservation reserve in my opinion. So Wielangta, Roberts Hill, Summerleas Road, Meehan Range, they would be part of the reserve system for the bird to ensure that it can breed in all years and that the species is capable of wearing - weathering the changes in distribution of foraging habitat as it changes between different years.

And how does the - just explain to his Honour how the setting aside of large areas like Wielangta, because they are nesting habitat, how does that translate - or how, in your opinion, is it possible for that to translate into breeding success and recovery? What is the link?---What is the - - -

What is the link?---The link?

Between setting an area aside like that, and breeding success and recovery?---Well, setting the area aside ensures that the current habitat quality is maintained, but also that the habitats that have been degraded in the past may recover to their natural densities of tree hollows. So in this instance the coupe 19D for instance it won't increase its capacity to support nesting swift parrots. It'll just maintain what it is at the moment. But it is an ideal quality swift parrot habitat, whereas some habitats that are being degraded may recover their natural densities of hollows, and it may enable more swift parrots to breed in that area at times when the foraging resource is largely concentrated in that area, which I say it will be in some years. Just that this year it's concentrated on the Meehan Range and at Bruny Island.

Thank you. Now, your Honour, I can't take the re-examination any further until I get some instructions about the hard drive issue.

HIS HONOUR: All right.

MS MORTIMER: And I may need to ask Mr Kennedy a couple of questions about that, before I am able to tell your Honour and my learned friend what our position is about that. So could I ask for a short break in relation to that?

HIS HONOUR: I was going to - in about five minutes I was going to break for 15 minutes in any event.

MS MORTIMER: Well, perhaps we could have 20, because there are a couple of issues about calls for documents that were made yesterday, your Honour, that I also need to follow up with my learned friend, and I could do that in the break.

HIS HONOUR: Mr Gunson, is that satisfactory?

MR D. GUNSON: Definitely, your Honour.

HIS HONOUR: All right. We will adjourn until 11 o'clock.

ADJOURNED [10.40am]

RESUMED [11.08am]

MS MORTIMER: Now, your Honour, I have had an opportunity to seek instructions from Mr Kennedy about the hard drive issue, and to talk to my learned friend, and we appear to have resolved the matter in a manner that I don't need to ask Mr Kennedy any further questions about.

HIS HONOUR: Certainly.

MS MORTIMER: So I ask that he be excused, your Honour.

HIS HONOUR: Yes.

MS MORTIMER: And then I will deal with the hard drive issue.

HIS HONOUR: Certainly. Mr Kennedy, thank you for your evidence. You may be excused from further attendance, but if you wish you may remain in court?---Thank you, your Honour.

<THE WITNESS WITHDREW

[11.09am]

MS MORTIMER: Now, your Honour, I just remind your Honour where we are up to with this. Mr Kennedy has given evidence, affirmed evidence, that the hard drive that has been tendered was the hard drive on to which he copied the CD and the DVD, and I have told your Honour that my instructions are that that is what happened, and that we don't tender it for any other purpose than to comply with the undertakings given by my instructor. But nevertheless, as I understand the position, Forestry Tasmania still wants to satisfy itself that what is on the hard drive is what Mr Kennedy has said is on the hard drive.

And to that end what has been agreed is that my instructor and Mr Kennedy and my learned friend's instructor, Mr McDonald, will view that part of the hard drive that contains the Forestry Tasmania material, for the purpose of Mr McDonald satisfying himself that it is on there. And then the hard drive will be destroyed by drilling it ceremonially somewhere, your Honour. And once that has happened I will seek leave to withdraw the tender of it, and ask your Honour to relieve my instructor from his undertaking in relation to that particular copy of the Forestry Tasmania material.

HIS HONOUR: All right. Can that wait until February?

MS MORTIMER: The withdrawal can. The ceremonial viewing and possibly destruction will hopefully happen today, your Honour, at lunch time. Certainly the viewing will happen at lunch time. I don't know about the destruction. It might depend on where there is a drill. So that is how we propose to deal with the hard drive, your Honour.

HIS HONOUR: Yes. Thank you.

5 MS MORTIMER: Now, that leaves the issue of some calls that were made for documents yesterday, your Honour, and if I can take your Honour first to transcript page 547, and line 25, Mr Tree made a call for the two files that were attached to the email of 31 October, that is Mr Meggs' email, and the emails that were sent by Mr Meggs to Dr Reed in relation to the PVA. That was the first call that was made. And then the second call that was made is at transcript 10 page 666, and that was a call I made about line 23, in relation to the field assessments carried out by Ms Ziegler, Mr Brereton and someone else, and I understand that my learned friend has a response to both of those calls.

15 HIS HONOUR: Mr Gunson?

MR D. GUNSON: With respect to the last matter, your Honour, my instructions are that a search is presently being made for those notes, and when they are located they will be dealt with accordingly, subject to any issues arising when they are found and looked at. But that is under way at the moment.

20 HIS HONOUR: Yes. Thank you.

MR D. GUNSON: In respect to the other matters, your Honour, the situation is that the Steve Reed attachments, and there is two of them, were prepared on 25 Mr McDonald's request for advice from Mr Reed, in his capacity as chief scientist for Forestry Tasmania, with respect to Drs Bekessy's and Wintle's affidavits, and we claim with those litigation - we are back to those litigation privilege, and in respect of the email, that is Meggs to Dr Reed - - -

30 HIS HONOUR: Sorry. You claim client legal privilege - - -

MR D. GUNSON: Yes, your Honour.

35 HIS HONOUR: - - - in respect of the emails?

MR D. GUNSON: With respect to those documents, your Honour, yes.

HIS HONOUR: The two files attached to the email of 31 October - - -

40 MR D. GUNSON: That is right, your Honour.

HIS HONOUR: - - - and the emails sent by Mr Meggs to Dr Reed?

45 MR D. GUNSON: That is right.

HIS HONOUR: All right. Do you know whether that is accepted?

MR D. GUNSON: Well, we agreed, I think.

5 MS MORTIMER: Yes, your Honour. What I have said to my learned friend is that I don't press them to adduce that by way of evidence at the moment, but I wanted him to put his instructions on the transcript, and we will consider our position in relation to that claim.

HIS HONOUR: I see. Maybe if there is a contest about that it is something that I might have to resolve.

10 MS MORTIMER: Yes, your Honour. Yes.

HIS HONOUR: Yes.

15 MS MORTIMER: And we will - - -

HIS HONOUR: In February.

MS MORTIMER: In February. Yes, your Honour.

20 HIS HONOUR: Yes.

MR D. GUNSON: We have it in mind, your Honour, that if it needs to be a matter of a contest for you to resolve then obviously affidavits will be - well an affidavit will be filed as to that position.

25 HIS HONOUR: Yes.

MR D. GUNSON: We will deal with that at that time.

30 HIS HONOUR: Yes.

MR D. GUNSON: And similarly, with respect, to the email from Mr Meggs to Dr Reed. Again it falls within the same category, and it has been agreed we will deal with it on the same basis, your Honour.

35 HIS HONOUR: Yes. Thank you. Would it also be possible to defer any housekeeping matters in February until after Mr Mooney's evidence has been dealt with, so that we don't detain him?

40 MS MORTIMER: Yes. Yes, of course, your Honour. Yes, of course. Well, if that is not going to be an appropriate course we will tell your Honour and our learned friends about that.

HIS HONOUR: If what is not going to be an appropriate course?

45 MS MORTIMER: Deferring this issue about the claim of privilege made in relation to the emails and the affidavits until after Mr Mooney is called.

HIS HONOUR: Oh, I see.

5 MS MORTIMER: What I have been reminded about, your Honour, is that some of these communications apparently do deal with matters in Mr Mooney's evidence.

10 HIS HONOUR: I see. I wasn't aware of that. Well, he has told my staff that he is holding himself available for that week. He also said the next. He must have been psychic at the time, because no one knew that the next was going to be available in any respect, and it did become available. But to a limited extent. What we will tell him is that we anticipate that he will - we are expecting that he will commence, but if it turns out that there are some issues that have to be dealt with beforehand we may send him away for a couple of hours.

15 MS MORTIMER: Yes, your Honour. Thank you. Now, I have just sent my junior to find out where Mr Tree is with our next witness, who is Ms Michaels.

HIS HONOUR: Right.

20 MS MORTIMER: Dr Michaels, and if your Honour can just bear with us while we locate both of those individuals.

25 HIS HONOUR: All right. I might just step into the anteroom, and you can let my associate know - - -

MS MORTIMER: If your Honour pleases.

HIS HONOUR: - - - when you are ready.

30 MS MORTIMER: Thank you.

ADJOURNED **[11.16am]**

35 **RESUMED** **[11.18am]**

40 HIS HONOUR: Yes, Mr Tree?

MR TREE: Thank you, your Honour. I call Dr Karyl, K-a-r-y-l, Michaels, who I have taken the liberty of having in the witness box.

45 HIS HONOUR: Thank you.

<EXAMINATION-IN-CHIEF BY MR TREE

5

HIS HONOUR: Yes, Mr Tree.

10 MR TREE: Thank you, your Honour.

Could you tell the Court your full name and residential address, please?---Karyl Frances Michaels, and I live at 2 Riawena Road, Park Beach.

15 Thank you. Park Beach is an eastern suburb of Tasmania, of Hobart?---Yes. Dodges Ferry.

Thank you. And could you tell his Honour, please, whether you are presently in paid employment, or have a business?---At the moment I'm not in paid employment. I do have a business, Environmental Training Consultants, and I'm
20 an Honorary Research Associate at the University of Tasmania.

You also hold a PhD which was awarded to you in 2000 in relation to the study of carabid beetles?---That's right. While it was in relation to carabid beetles I actually looked at quite a lot of other ground dwelling beetles, as well, as part
25 of that research.

Thank you. Could the witness please be shown her affidavit, which are in volumes 1 and 2? Could I firstly have her shown volume 1, and could I get you to turn to page 88, please. Between page 88 and page 107 is a copy of an
30 affidavit that was affirmed by you on 29 May 2005?---Yes, that's right.

Your Honour, I would ask that that affidavit be taken as read, and form part of the evidence of the applicant in this case.

35 HIS HONOUR: Yes. That will be so.

MR TREE: And could the witness please be shown, I think it is volume 2, page 485?---Yes.

40 If you look at page 485 up until page 490 is that a copy of a second affidavit affirmed by you on 18 October 2005?---Yes, that's right.

Your Honour, similarly I would ask that that affidavit be taken as read, and form part of the material of the case of the applicant.

45

HIS HONOUR: Yes. As I understand it, it includes the curriculum vitae, which is omitted from the first one?

MR TREE: It does, your Honour. That is so.

HIS HONOUR: Yes. Thank you. Yes, that is treated as part of the evidence of Dr Michaels.

5

MR TREE: Thank you, your Honour. Now, your Honour, I seek leave to ask this witness some questions arising out of affidavits that have been sworn on behalf of the respondents witnesses.

10 Firstly, Dr Michaels, in your affidavit you have made reference to a meeting in which your recollection is that Mark Wapstra made a certain comment to you in relation to logging not being an option. Do you remember that aspect of your affidavit?---Yes. Yes, I do.

15 I wonder if the witness might be shown volume 4 of the Court books. And if you could turn to page 1453, please?---Yes.

Have you been shown a copy of these minutes a few moments ago?---Yes.

20 Prior to then had you ever seen these minutes before?---Not to my recollection, no.

You will see that they pertain to a meeting, or purport to pertain to a meeting on 11 March 1997?---Yes, that's right.

25

And purport to have you as present at that meeting?---Yes. I'm quite sure I was present at that meeting.

All right?---I remember the meeting.

30

Now, you have had an opportunity a few moments ago to read the minutes, have you not?---Yes. I did read them.

35 Are you able to tell his Honour whether that appears to be minutes of the meeting referred to in your affidavit, in which you have a recollection of Mr Wapstra saying something?---It certainly seems to be minutes from the meeting that I recollect.

40 Thank you. Now, there is no mention - well, I take you through the first bullet point of it. It says that:

Karyl noted that she would prefer that the areas within the range of the beetle were not logged at all until further studies had been conducted on the species habitat requirements and distribution.

45

To your recollection does that accurately reflect what you said towards the beginning of the meeting?---Yes. I don't know that I said I would prefer. I think I said, don't log.

All right. And in that context what is your recollection as to what response you received?---The response was that not logging was not an option.

5 And who do you recollect as having made that response?---My recollection was that it was Mark Wapstra that made the comment.

Thank you. That was in relation to coupe WOO7A, was it not?---Yes. That's right, where I'd previously found the beetle.

10 And that, I think, was in about 1996 you found the beetle there?---Yes. That's right.

15 Thank you. Now, whilst you are in volume 4 can I direct your attention please to page 1457?---Yes.

And you will see that that purports to be a very brief over view in relation to the broad-toothed stag beetle, of which you are the author?---Yes. That's right.

20 Is that correct that you were indeed the author of that document?---Yes, I was the author, and I provided this to Forestry just before the meeting.

Thank you. The meeting that we see the minute of - - -?---Yes, that's - - -

25 - - - in 1997?---That's right.

Thank you. And can I also direct your attention please to page 1461 of the volume you have in front of you?---Yes.

30 And you will see that that purports to be a publication by - or perhaps a report by you?---Yes. That was a report I did for Forestry, looking for the stag beetle in selected areas in the Wielangta State Forest.

35 Thank you. And you undertook that work for Forestry Tasmania approximately when?---I think it was about - I'd actually have to have a look at the date, because it was sort of '95/'96. It was shortly after the meeting.

Thank you?---It actually might have been '97, I'm sorry, I'm not really big on dates unless I have got them written down.

40 All right. Now, could I get you to keep that page open, please, in volume 4, page 1461, and could I also have placed before the witness volume 5 of the Court book, please, your Honour? Can I firstly direct your attention to page 1968?---Yes.

45 And you will see there, there is a sentence at paragraph 115 which reads as follows:

The prescriptions in the TFA -

and I want you to assume that that stands for threatened fauna adviser -

5 *were developed using the initial work of Michaels 1996 and the
subsequent work of Meggs 1999(a),(b) and by consultation with the
species specialist, Jeff Meggs.*

Can I get you, please, then to turn to page 1997?---Yes.

10

You will see at J a reference to Michaels, K., 1996:

*The occurrence of the endangered stag beetle, lissotes latidens,
westward -*

15

I won't embarrass myself by trying to pronounce the balance of those Latin
names -

in selected areas in the Wielangta forest block.

20

?---Yes, so we will be referring to this report?

Is that the paper we have identified at page 1461?---Yes, that's the same paper,
or report.

25

Can I get you, please, to go back to paragraph 115 on page 1968?---Yes.

30 You will see that there is a suggestion made there that the prescriptions in the
threatened fauna adviser were developed using in part that work?---Yes, I'm
sort of actually rather at a loss as to understand that because the work doesn't
really suggest any prescriptions for mitigating the effects of logging.

Thank you. Could I get you, please, to turn to page 2066?---Yes.

35 And the evidence apparently will be that these are the excerpts, or these are
parts of the threatened fauna adviser that pertained to the broad-toothed stag
beetle?---Yes.

40 Thank you. Have you had an opportunity to recently review pages 2066 to
2070?---Yes, I just recently looked through them.

45 Thank you. Can I ask you whether you have considered whether those
recommendations or prescriptions are consistent with your 1996 work or
not?---No, I don't believe they are.

Do you have a view as to whether those recommendations - well, can I ask you
what your view is in relation to those recommendations and the future of the
broad-toothed stag beetle?---Having read the recommendations, my opinion is

that they would not ensure the survival of the Wielangta stag beetle in the long term. I believe they are quite inadequate and as I have said before I think further research is needed before we can actually provide prescriptions that will enable the beetle to survive.

5

What sort of research do you say needs to be done before we can be confident as to the effect of prescriptions on the beetle?---We need to have a much stronger grasp on where the beetle occurs in Wielangta, what its habitat requirements are, and what its long-term habitat requirements are.

10

And if that is not done is it possible for you, for instance, to draw prescriptions which will ensure the survival of the beetle in the long term?---No, the prescription that I would draw is that no logging be undertaken in areas where the beetle is known to occur until we know a lot more about the beetle.

15

Now, whilst you are in volume 4, can I direct your attention, please, to page 1705?---Yes.

20

At that page you will see that - it is the first page of an affidavit by Sandra Roberts?---Yes.

So far as you are aware do you know Ms Roberts?---Not that I'm aware, no.

25

Thank you.

HIS HONOUR: Dr Roberts?

30

MR TREE: Yes, your Honour, is quite right, I have managed to yet again strip an academic award from a witness.

Can I get you, please, to direct your attention to page 1724?---Yes.

35

And you will see on that page, at the bottom of the page, there is a heading Edge Effects in Forests and Micro Climate?---Yes.

And you will see that that continues until page 1726, the bottom of that page?---Yes, that's right.

40

Have you had an opportunity to consider the contents of those paragraphs in between the two headings?---Yes, I was just looking at that recently.

45

Thank you. And can you tell his Honour, please, what your response to those paragraphs is insofar as they deal with edge effects?---Well, I think that the paragraph argues quite well the fact that edge effects are going to have a major impact on stream-side reserves. It says quite clearly that impacts are a minimum of 10 metres in and if you look at the stream-side reserves that are only 10-metres wide, that certainly could have a major effect, and also wildlife habitat

clumps, that's going to be well within the area that's going to have a major edge effect on those areas, drying them out.

5 Now, you are aware I think of two facts, it is apparent from that answer, firstly, that in the coupes that you have been asked to consider there are two - at least two types of allegedly ameliorating matters that have been implemented. Firstly, stream-side reserves, which are 10 metres in the case of class 4 streams?---Yes, that's right.

10 And secondly wildlife habitat clumps?---That's right. And it's my understanding that the wildlife habitat clumps will be sort of something about 50 by 20 metres. So you can imagine if you've got something that's 20 metres wide, edge effects coming in 10 metres from either side, that's obviously going to have a major impact on those areas. And stream side reserves that are only 10 metres wide,
15 again the edge effects are definitely within the minimum that they're saying and most edge effects are actually in further than that as well.

And what is the nature of the edge effect that we're talking about? What is the edge effect?---The edge effect is basically complete changes sort of drying out
20 from the edges and changes in the microclimate within the forest on the edge due to sort of increased wind getting in, increased sunlight.

In the case of a stream side reserve, that is 10 metres on either side of the stream, is that regarded by you as a total 20-metre block?---Well, no, because
25 obviously the stream itself is going to relate to a be a gap within that stream side reserve, which will then allow edge effects to come in through the stream.

So is it one block of 20 metres or is it two blocks of 10 metres in that circumstance?---Well, in my opinion it would be effectively two blocks of 10
30 metres.

Thank you. Now, to the extent that wildlife habitat clumps as leafed in the coupes here exceed 20 metres in width, does the edge effect necessarily stop at 10 metres?---No. I think the report also goes on to say that sort of various
35 other things happen with it, that wind throw can extend up to 50 to 100 metres in from the edge, which is almost the other side of the stream side reserve.

Sure. Thank you. Can you understand, or can you tell his Honour, please, what your understanding of wind throw is, please?---My understanding is wind
40 causes various of the trees and plants to fall down.

And is it restricted to the mechanical disturbance of trees and vegetation?---Well, that would be the major effect of the wind throw would the mechanical disturbance of trees.
45

And what would be the other effects of the wind flow - of the wind throw?---Well, it's also going to have an extreme drying out effect on the vegetation.

Thank you. Now, I wonder then if you might flip back in volume 4 to page 1189?---Yes.

5 You will see that that is an affidavit of Mr Meggs?---Yes.

Do you know Mr Meggs?---Yes, I do.

10 Have you had an opportunity to consider his affidavit?---Yes, I have read through it.

Thank you. Can I first direct your attention to paragraph 18 of his affidavit, please? Can I take you through that bit by bit. Firstly the sentence:

15 *A fundamental requirement for the development of conservation management strategies for threatened species is knowledge of the spatial distribution and extent of habitats utilised by the species and the identification of areas where the conservation requirements of the species may conflict most strongly with land use practices.*

20

Do you agree or disagree with that?---Absolutely, I agree quite wholeheartedly with that paragraph.

25 Thank you. With that paragraph or that sentence, sorry?---Sentence.

Thank you. The next sentence reads:

30 *It is my opinion that the research conducted by Meggs '99 subsequently published as Meggs and Munks 2003 represents the best information available on which to base such risk assessment for the endangered broad-toothed stag beetle.*

35 Do you agree or disagree with that proposition?---No, I don't agree with that sentence.

Why not?---I believe that there was - that the information and the research didn't go far enough, that some of the conclusions that were made from that research were not what I would have made, and that we still know insufficient.

40 And in what respects did the research not go far enough?---I believe that the fact that dry forest, looking at dry forest early on where it was decided after looking at 10 sites that it was thought that this was obviously not suitable habitat and then moved on might have been the wrong thing in sort of light of the fact that the beetle has been found in dry forest areas. I'm also a little bit
45 dubious of the results of the model. I've seen sort of the map just recently. I have to admit I didn't see it at the time. And it shows quite clearly that quite a number of the locations, in fact almost twice as many locations of the beetle

occur in the dry forest areas as appear in the modelled area, and that leads me to think that there is serious problems with the model.

Thank you. The next sentence:

5

This research tripled the known range of the species to 280 square kilometres, which 15 per cent constituted potential habitat.

10 Do you have any difficulty with that?---Well, slightly, because sort of the range, it's kind of been established on a join-the-dots. I don't necessarily agree that everything within that area was the range of the beetle.

15 As you understand it, what has occurred is that the extremities or the outliers of sites in which the beetle have been recorded have simply been joined together with lines and the area calculated?---Yes, that's my understanding of how it was done, and I don't necessarily agree that the beetle will occupy all the area within that join-the-dots.

20 And what do you say of the calculation that only 15 per cent of the area within the dots constituted potential habitat; do you agree or disagree with that?---Well, actually it's quite possible that the area is considerably less than that. That particular figure I think is based on the model, which as I have just said, I don't necessarily agree with the model. And its potential habitat is probably quite significantly smaller than that, because within the area that's been
25 purported as where the beetle occurs, its habitat is going to be very small and very widely scattered. So in real terms, it could be as little as 1 per cent of that area is potential habitat.

Thank you. He then continues:

30

Potential habitat for the beetle was identified as a range of wet forest types including damp eucalypt forest, wet eucalypt forest, rainforest and riparian areas amongst drier forest types.

35 Do you agree or disagree with that sentence?---Well, a bit of both because obviously it has been found in some of those forest types but then again it has also been found in dry eucalypt forests so while potential habitat is in those areas, it is also not, I don't believe, that dry eucalypt forests should have been excluded from that area of habitat.

40

Well, you will see that is specifically dealt with in the following sentence:

Dry eucalypt forest was found to be unsuitable habitat for the species.

45 Do you agree or disagree with that?---No, I disagree with that.

And on what basis do you disagree with it?---Well, two facts. Firstly, I have actually found it myself in dry eucalypt forest and Meggs own work, if you look

at the map that was provided by Forestry, as I said before nearly two-thirds of the locations of the beetle from that study were found in dry eucalypt forest.

5 Thank you. You said that you yourself have found the beetle in dry eucalypt forest. On how many occasions have you found it in dry eucalypt forest?---Well, admittedly only twice out of the six occasions that I found the beetle.

10 Right. And the first occasion that you found it in dry forest was?---I think it was back in 1995.

In coupe WT007?---That is one of the locations, yes, and then sort of another place not very far away from there.

15 Thank you?---And also I think the initial recorded record for the beetle was at Bust Me Gall Hill, which is dry eucalypt forest, by George Bornemissza.

20 Right. And he is a person with whom you have published papers I think over the years?---Yes.

He then continues:

25 *Relative to other Tasmanian lucanids, latidens was found to occur at quite low population densities.*

Do you agree with that?---Absolutely. I think it is far and away the rarest stag beetle that we have in Tasmania.

30 And he then continues:

The species appeared to exhibit a preference for forest with a well-developed over-storey and greater than 10 per cent ground cover of coarse woody debris.

35 Do you agree or disagree with that?---Well, I agree that in the locations where he found it that that was probably quite true.

Thank you. And he continues:

40 *Although latidens are soil dwelling throughout its life cycle it has a close association with coarse woody debris occurring under logs at the interface of soil and coarse woody debris.*

45 ?---Yes, that's true.

Thank you. Can I then direct your attention to paragraph 19 please. The first sentence again:

Major threats to species from forestry practice identified by Meggs and Meggs and Munks and in the relevant threatened species listing statements for latidens include clearing of potential habitat for agricultural plantation development.

5

Do you agree or disagree with that?---Absolutely agree.

Clear fell, burn and sow silviculture.

10

?---Absolutely agree.

Intensive management of regrowth forests.

15

?---Quite likely, yes.

And:

Post harvest firewood collection.

20

?---Yes, I am sure that's quite likely in a very highly threatening process.

Thank you. He then says:

25

Partial harvesting has never been identified as a specific threat to the species.

30

Do you agree or disagree or don't you know?---I don't know because obviously we don't have the research to show whether partial harvesting is going to be a threat or not but my opinion would be that that would certainly depend on a lot of factors, not the least is what exactly is partial harvesting.

35

What do you understand partial harvesting to be?---I believe, although I am not sure, that it is taking a certain amount of the large logs out and leaving seed trees or wildlife habitat clumps.

40

And is there a percentage at which you would decline to use the term partial if there was 90 per cent of cover removed or 80 per cent or 70 per cent?---Yes, well, that is, I guess, the crux of the matter. Just exactly what is partial? What percentage is removed? How does that affect the over-storey? How will that effect the long term recruitment of large over-mature trees on the site to future habitat.

45

The research that you have undertaken that is appended to your affidavit and perhaps I might just take you to volume 1 of the Court book which I have managed to lose. Thank you. Page 97 of Court book 1?---Yes.

That is a paper which you published together with the gentlemen you told us about a few moments ago, that was a study of the effects of clear fell harvesting

on lucanid beetles generally?---Yes, that was on sort of lucanid beetles in wet and dry forests so there was the range of beetles in the Picton Forest in the south and the three lucanids species that occur in Wielangta.

5 And was that in relation to partial harvesting or a full clear fell?---No, it was clear fell, sow and burn.

And what effects did you find, in summary form, were consequent upon clear fell harvesting on the beetles?---Briefly, there is often an initial survivor of some
10 species of lucanids so they might survive the clear fell and burn but my research and research elsewhere shows that usually they disappear within a few years, they don't stay and breed in that particular habitat and we are still unsure as to how long it takes before the forest regenerates sufficiently that they will come back.

15 Is there any work that you are aware of that is similar to that which is attached to that affidavit which relates to partial harvesting on beetles?---Sorry, I am not clear about the question.

20 You see that your paper refers to the effects of clear fell harvesting on lucanid beetles in wet and dry sclerophyll. Are you aware of any paper that investigates the effects of partial harvesting on lucanid beetles in wet and dry sclerophyll forests?---No.

25 Can I direct your attention please to paragraph 20 and again I think I need to take it sentence by sentence. Firstly, it says:

Populations of latidens are at a highly variable risk of extirpation across its range.

30 HIS HONOUR: Sorry, which Court book?

MR TREE: Sorry, your Honour, I am back at page 1197 of volume 4?---And paragraph?

35 Paragraph 20, at the top of page 1197. I was just reading the sentence:

Populations of latidens are at a highly variable risk of extirpation across its range.

40 Can I just get you to explain to his Honour what extirpation is?---I would think it is another way of saying extinction, your Honour.

And it continues:

45 *Reflecting the highly variable distribution of potential habitat throughout this area.*

Do you agree or disagree with that?---I agree with that.

He then says:

5 *In the western half of the species range populations occur in relatively isolated patches.*

Do you agree with that?---Yes.

10 And he then continues:

Or riparian corridors of wet or damp forest amongst a matrix of dry eucalypt forest.

15 Do you agree or disagree with that?---I don't know I'm not familiar enough with exactly - one of the problems in looking at the research is that it doesn't really give you a good enough idea of what the site variables are. So I agree that that's what the conclusion that Meggs has given from his paper, I don't necessarily agree that it is right, but I would like to see a lot more information
20 on his site descriptions.

Have you, yourself, found the beetle in riparian corridors of wet or damp forest?---No.

25 Have you ever found it in a riparian corridor anywhere?---No.

And a riparian corridor, so as we understand what we are talking about, is effectively the area adjacent to a stream?---Yes, that's right. I believe from reading Meggs' original report to Forestry that in fact only two specimens were
30 found in what would classify as a stream-side reserve, so an area alongside a stream out of the 57 individuals that he found. And that was sort of - it doesn't really say whether it was newly clear felled, so whether they actually had just moved in there or whether they were long term residents.

35 And he continues:

And are at a high risk of extirpation from stochastic events such as catastrophic wildfires or uncontrolled land use practices.

40 Do you agree with that?---Certainly uncontrolled land use practices are going to be a major threat to the beetle.

And wildfire?---Yes, wildfire is probably an ever-increasing threat given that the area is getting dryer.

45 How does wildfire impact upon an area that is getting increasingly dryer?---Well, it burns the habitat.

And does that have any long term impact upon the habitat?---It has long term impacts but possibly not as long term as completely removing the vegetation. Obviously wildfires tend to be not necessarily to burn completely all the trees and I am sure we have probably all gone through and sort of seen that the epitomic growth, so that you do get canopy growth coming back after fire. So
5 it is not going to have the same sort of effects as completely removing the vegetation because you will, within a certain amount of time, get back the overstorey canopy. And also in some respects it is possibly that wildfire was one way of recruiting large logs back on to the forest floor for the next round
10 for the beetle.

He then says:

*The majority of potential habitat of the species occurs as a relatively
15 large continuous area in the eastern half of the species range encompassing 17E - coupe 17E.*

?---No, I don't agree with that.

20 And why don't you agree with it?---Well, his own work shows that over two-thirds of the locations occur not in that particular area, so there's only, I think, eight out of the 25 locations occurring in that particular area. I don't think that's enough to say that that is the majority of potential habitat.

25 Thank you. He then says:

*Within this area potentially threatening processes are not occurring at
a sufficiently high rate to suggest that local populations are facing a
30 very high risk of extirpation in the near future.*

Do you agree or disagree with that?---I don't know enough about what is actually occurring in that area, but given that I don't believe that that's the area of potential habitat, I think it's kind of irrelevant.

35 Thank you. He then says:

*The population of the species on Maria Island can be considered
relatively secure because none of the potentially threatening land use
activities identified as likely to impact on habitat of the species can
40 occur.*

Do you agree or disagree with that?---Well, no. I don't agree that they can be considered relatively secure. I consider that any island population is by its very nature not secure. If something happened to the island, wildfires, you know,
45 and the other thing is I don't believe that that population should be considered as being the same population that occurs on the mainland. It's been genetically distinct for probably at least 10,000 years and elsewhere other places manage island populations separately. So no, I don't think it's secure.

5 Would you in calculating the numbers and distributions of the BTSS factor in or
out the Maria Island population?---I certainly wouldn't factor it in to the
mainland population. As it is I believe that there is still only sort of five or six
beetles have been found on Maria Island. That's hardly a secure population in
itself. But again I don't believe that it should be considered with the mainland
population, I believe they're genetically distinct and should be treated that way.

10 Thank you. He then continues:

15 *I do not consider that the species is currently facing a very high risk of
extinction in the wild in the near future, despite its eligibility for listing
as an endangered taxon under the Environment Protection and
Biodiversity Conservation Act.*

20 Do you agree or disagree with that statement?---No, I disagree. I believe that
the beetle, because of its very low population numbers, the fact that its habitat is
very widespread and we still really no insufficient about exactly what those
habitat requirements are. I think it is at grave risk at the moment of
uncontrolled land use.

Can I then direct your attention, please to paragraph 24?---Yes.

25 You will see the first sentence reads:

30 *Whilst there is insufficient data to draw any firm conclusions on the
long term effects of Forestry practices on the populations of latidens,
there is some limited evidence from Meggs and Munks that latidens
may be able to survive in or recolonise areas following clear fell, burn
and sow silviculture, areas previously selected to partial logging and
stream-side reserves within eucalypt plantations.*

35 Do you agree or disagree with that sentence?---I disagree. Well, I agree that
there's - no, I disagree. There is no evidence.

So where he says there is insufficient data to draw any firm conclusions; do you
agree or disagree with that?---Absolutely, there is insufficient data to draw firm
conclusions.

40 But he then goes on to say there is limited evidence that the beetle may be able
to survive in or recolonise etcetera; do you agree or disagree that there is that
limited evidence?---My own evidence shows that it has survived an initial clear
fell burn, but then again my own evidence has shown that two years later it was
no longer there. So it hasn't maintained its presence in that area. I don't believe
45 there is any evidence at all that they recolonise areas following clear fell, sow
and burn. I believe that the evidence that Meggs provided that two individuals
were found in a stream-side reserve within a eucalypt plantation is insufficient
because it's not long term evidence, it's just an initial - it could be exactly the

same as the clear fell, sow, burn that it survives initially, but we still don't have the evidence that they're actually maintaining and breeding populations in these areas and I think that's critical.

- 5 Do you dismiss altogether the prospect that stream side or riparian corridors might be habitat for the beetle?---We can't - I can't dismiss it completely, because as I say we still don't have the evidence, but it's my opinion that certainly 10 metres to 30 metres would be totally inadequate. And also it would depend very much on the habitat that's actually within any stream side reserve.
10 You could have a stream side reserve with absolutely no logs.

He then continues:

- 15 *This information, combined with an assessment of the likely impacts of forestry, compared to natural stochastic disturbances, and the post-harvest evidence of ongoing habitat potential in coupe 17E, lead me to conclude that the harvesting of 17E will have had only a minor and short-term impact on the local population of the species, and that sufficient habitat will be available throughout the silvicultural cycle to*
20 *maintain the local population in the area.*

Do you agree or disagree with that sentence?---I disagree. I believe that we don't have sufficient evidence to say that conclusively.

- 25 Are you aware of any study that has been undertaken which would allow that conclusion to be undertaken or to be made?---No.

Thank you?---And in fact the studies to date on sort of clear felling and so burns suggest that that is not likely to be the case.

- 30 Incidentally, in so far as there are vegetation strips that have been retained either by wildlife habitat strips or skyline reserves, have you made any study in relation to the occurrence of carabid beetles in such strips?---Yes. I did some work a few years ago with Rob Taylor and Dick Bashford from Forestry, looking at
35 unlogged strips in the Picton Forest, which was one of the other areas where I've done some work. And we found that of what had been previously identified as mature forest specialist beetles, carabid beetles, that the smaller strips didn't actually have beetles there. Which is quite interesting, because the smaller strips in those locations was 59 metres, so that's another reason that leads me to
40 believe that sort of small strips are unlikely to be suitable for specialist beetles in the long run.

- 45 Could the witness please be shown this document? Can you tell his Honour please what that document?---Yes. It's a paper that I wrote with Robert Taylor and Dick Bashford on the occurrence of carabid beetles in retained unlogged strips within production forests of southern Tasmania, and it was published in Nature Conservation in Production Environments, Managing the Matrix, so it

was essentially a special edition of Nature Conservation that looked at the importance of the matrix.

5 Is that a journal to which contributions need to be reviewed?---Oh, yes, it's definitely been peer reviewed paper.

Now, if we look for instance at the third page of that report we see that there is the admonition, "Author please supply a better copy of this figure." Is this as published in the journal, or - - -?---No. This was an author copy that - which is 10 the only copy that I can actually find amongst my papers at the moment unfortunately. But it - yes, it definitely has been published.

Thank you. I tender that, your Honour.

15 HIS HONOUR: Any objection? That will be exhibit R.

EXHIBIT #R PAPER PUBLISHED IN NATURE CONSERVATION

20 MR TREE: Is this the research that you were telling us about a few moments ago?---Yes, that's right.

25 Can you direct his Honour please to the passages of the document which pertain to what you have just been talking about, please?---Okay. Page 123 and the second paragraph.

30 Yes. We can see that there has been some highlighter pen applied?---Yes. And a little bit further, so, "Kilnisata (?) notonomus politus," which - - -

Sorry, whereabouts are you on - - -?---About half way down the paragraph of the second paragraph.

35 Yes. And is that the sentence which commences - let me try and find a full stop somewhere here - "N.politus was also absent from S1, the narrowness of the strip sampled"?---Yes. That's right.

40 Then there is another Latin name that I am not even going to commence to embark upon, "Was only common in three of the mature forest sites, and in one of the nine year regrowth sites"?---Yes.

45 And then, "Three other beetles," or, "Three other species at least, were generally more abundant in regrowth of nine years or younger"?---Right. Actually I'm just looking at that. It's probably not the - I think we need the - - -

Can I direct your attention please to page 125?---Yes, that was it. Okay. So, again, second paragraph - - -

Is that the first paragraph that in fact commences on that page?---Yes, the first one that commences on the page. Yes.

5 Commencing with the word, "Based"?---"Based on the classification of areas," yes.

And in that you have written, have you not:

10 *Based on the classification of areas as depicted on the dendrogram, there appeared to be no consistent difference between strips, arid blocks of mature forest, in terms of their carabid faunas. However, for the two most abundant species identified by Michaels and McQuillan as mature forest specialists, the former was virtually absent from both of the two narrower strips, and the latter was virtually absent from one of these, but common in the other.*

15

?---Yes.

20 *It tends to suggest that narrow strips may not be as suitable as large blocks for these species. However, one of the blocks of mature forest also had very low numbers of both these species. Without further sampling of narrow strips it is not possible to separate the possible effects of the site differences, and the effects of strip width. Both of the narrow strips had eucalyptus regnans as the dominant eucalypt,*

25 *whereas all of the other sites had eucalyptus obliqua was dominant. Sampling of narrow stream side reserves with eucalyptus obliqua were dominant should be undertaken to see whether politus is a dominant species in such sites.*

30 ?---Yes, that's right.

Now, was the broad-toothed stag beetle one of the species that you were reviewing there?---No. No, this particular study was only on carabid beetles.

35 Thank you?---And carabid beetles are sort of slightly different to lucanids. They're active hunters.

40 Are you aware of any work within the scope of this research that you and Mr Taylor and Mr Bashwood undertook that pertains directly to the broad-toothed stag beetle?---No. Well, the broad-toothed stag beetle doesn't actually occur in the Picton area. It's extremely localised, and only occurs in the Wielangta area.

45 Sure. But are you aware - you were quite right. Are you aware of any study of this scope directed towards the range of the broad-toothed stag beetle which has as its focus the occurrence of the broad-toothed stage beetle in retained unlogged strips?---No. No. I'm not aware of any other studies.

Thank you.

HIS HONOUR: There is a broad-toothed stag beetle so called though on Maria Island?---Yes.

5 Yes. But you say it is a different type of broad-toothed stag beetle?---Well, while it physically looks the same, it's probably genetically distinct. But yes, it is called the same species, yes.

10 In what respect is it genetically distinct?---It's been separated from the population on the mainland for at least 10,000 years.

15 MR TREE: There has been no research in relation to genetic mapping or anything of that - - ?---No. No, there hasn't, but I just suspect that given the extremely long time since they've been isolated, it's quite likely that it is.

Thank you. He then concludes - I am back, sorry, at page 1198 now in volume 4?---Yes.

20 It concludes that paragraph by saying:

Coupe 19D largely consists of unsuitable habitat so the harvesting of this coupe will have minimal if any impact on the local population of latidens assuming that coupe 19D is of principally dry sclerophyll or dry mature eucalypt forest.

25 Do you agree or disagree with that statement?---Well, I don't agree that we know sufficient to know that it is unsuitable habitat.

30 Thank you. In so far as there is any loss of habitat for the beetle, can you tell his Honour, please, what effect that is likely to have?---I believe that any loss of habitat could be detrimental to the beetle. At the moment it's as I said before it occurs in very low numbers. It's very widely scattered and we're still unsure as to exactly what the habitat requirements are. So any potential loss of potential habitat could be critical. It could be the thin edge of the wedge that pushes the species to extinction.

40 Is it possible to accurately predict the areas in which the beetle might be found?---Well, considering the model seems to be totally inadequate to predict where the beetle is found, no, I don't believe at this stage that we can predict where the beetle is going to be found.

45 Can there be areas of what appear to be optimum habitat that are uninhabited by the beetle?---Absolutely. That's well known, not just for this particular beetle but for a lot of rare and specialised beetles. The areas that we think would seem to be us to be perfect habitat, they're just not there. So that's another cause for concern as well.

Thank you. Can you look at paragraph 27, please?---Yes.

You will see that it reads:

5 *The species have been recorded at 36 localities, 34 from Meggs and*
Munks consisting of 25 new records and nine previously unpublished
records from other sources. The 2002 record from FTs conserved
database and Dr McQuillan's record for 17E as noted from appendix I,
10 *his affidavit of 29 May. Thirty of these records are from mainland*
Tasmania with six from Maria. Dr McQuillan made reference to
additional findings of the species on Maria Island in appendix I of his
affidavit but he has not provided any specific locality details.

15 Do you have any comment in relation to that?---Well, firstly while Meggs - the
paper from Meggs and Munks says that the species has been recorded at 36
localities, in fact some of those localities are the same locality but with different
recording dates. So I don't see - my personal opinion would be that they are not
exactly additional localities.

20 All right?---So I think from that, and there was also another one of Meggs and
Munks that has exactly the same grid reference. So again I suggest that's the
same. There's also a couple of those where the location would be, the grid
reference is maybe 100 metres difference, which is within the 200 metres that
Meggs suggests as a dispersible ability of the beetle. So again, my opinion
would be that they are actually the same location. So I would probably bring
25 that back down to possible 31/32 known localities at the moment.

30 But is there any significance between - - -?---And actually, I would bring that
down even lower because I know that at some of the recorded localities, first of
all one of them was my own record, and that was from a newly clear-felled site.
And that's been entered as a locality, but my studies at that site sort of a year or
so later found that the beetle was no longer there. So I don't believe that that
should be used as a locality either.

35 An historical locality perhaps at best?---Yes, an indication that the beetle
certainly occurs in the area, but the locality data is not what I would call good
data.

40 But even if your correct and there are only 29 or 30 or 31, whatever it be,
localities as distinct from 36, does that make any difference as to the species
abundance for the beetle?---No, absolutely not, because at most of those it was
possibly one to I think the most individuals that Meggs found at any one place
was six and I am unsure whether that was actually live individual beetles
because Meggs did actually use body parts of dead beetles in his beetle count.
So I'm unsure whether those six actually represented live beetles. But yes, no,
45 they are extremely low numbers. And when you consider that Meggs original
study actually looked at 90-odd sites, you can see that even looking for it in a
wide range of areas, it's still unlikely to turn it up.

Thank you. Can I direct your attention to paragraph 38, please?---Yes.

You will see he says this:

5 *The lines of evidence we -*

and that is he and Dr Munks I think you will find -

10 *drew on to support our conclusion that dry forest could generally be
considered unsuitable habitat included: (a) our failure to find the
species in the 10 dry eucalypt forest sites sampled.*

Do you have any comment in relation to that, considering that the method that
they used was log rolling?---Well, it's - I don't think it's conclusive evidence
15 because as I said before they actually looked at 90-odd sites and only found the
beetle in 25 of them. And that was after they had actually excluded dry forest
sites, although I'm not too sure that they did exclude dry forest sites when I
look at the records. I don't believe log rolling sampling is necessarily going to
be completely effective as a method for sampling the beetle. It's quite likely -
20 and also there was a limitation involved in that in that the logs could only be 50
centimetres because that was the largest log that could actually be rolled by a
couple of people. It's quite likely that they might have been under larger logs,
and in fact I think probably from my experience in finding them alongside very
large logs that it's likely that large logs are probably a very important habitat,
25 particularly in dry forest. So the limitations of the sampling method are
obviously sort of quite easy to see. So you know, if you can only turn over a
certain size log and they actually occur under larger sized logs then that's not
going to be very effective. So I think basically that they just didn't go far
enough with their method. They made a decision early on and I'm quite sure it's
30 like anything else, that finances probably and resources were driving the
decision, but I believe that it was a decision made in error.

And (b) he says:

35 *Our confidence that the log rolling sampling method was the best
method available to locate the species.*

Do you agree that log rolling of logs under less than 50 centimetres diameter is
the best method available to locate the species?---No, I don't. I mean I agree
40 that it was possibly the best that they could come up with for the particular
study, I just don't think it was necessarily the best way to find a true record of
locations for the beetle.

If logs in excess of 50 centimetres diameter could not be easily rolled in dry
45 forest, what would be the best method available to locate the species?---Well,
it's kind of tricky really, because obviously Meggs did say that he considered
that pit-fall trapping was not a good way - an effective way. Certainly, I would
say that the strike rate for pit-fall trapping was probably getting close to that of

log rolling, but I certainly do agree that it's not an ideal situation because it will of course kill the beetle unless you do use dry traps. So the other option could have been to actually set dry traps. It's a lot more labour intensive, it means that you have to basically be there every day for a certain amount of time to check it.
5 So there are other options, but I guess the big problem is resources, time and money is going drive what you ultimately do.

Because the advantage of dry trapping is intended to be that the beetle doesn't die, but if you only come back every month to check the trap it is dead
10 anyway?---That's true and also you have to be fairly spot on anyway because you will get other things in there, and if you're not fairly quick the larger things will eat the smaller things. It's a beetle eat beetle world out there.

HIS HONOUR: It sounds like Sydney.
15

MR TREE: Now, he then continues in (b):

By the end of the study the probability that finding the species in the three other forest types: wet eucalypt, damp eucalypt and riparian wet forest using this method were 53 per cent, only 25 records from 47 sites.
20

I think that is a simple matter of statistical analysis?---Yes.

25 (c) he says this, though:

The preliminary survey revealed that none of the nine localities for which precise locations existed occurred in dry eucalypt forest as defined in our study. Michaels 1996 stated that the species could be found in the full suite of forest types occurring in the Wielangta area including dry eucalypt forest on the basis of a record from Forestry coupe WT007A.
30

35 Firstly, was it the case that you identified that the species could be found in the full suite of forest types in the Wielangta area?---Yes, I did.

Secondly, was the basis for your assertion in relation to dry eucalypt forest the basis of the record from coupe 7A?---That was one of the records, yes.

40 Thank you. Was there any other?---Yes, there was another one that was not a coupe, but it was an area that was not far from that particular coupe and in dry forest.

I see. And you will see there that Mr Meggs says this:
45

This coupe is predominantly dry eucalypt forest.

Do you agree with that?---Yes, it certainly was.

5 But the location of the record occurred in a riparian patch of damp eucalypt forest within the coupe; do you agree or disagree with that?---No, that's not right, it wasn't. It was definitely an area of dry eucalypt forest with no riparian patch.

Has Mr Meggs ever inquired of you the precise location that you identified the beetle in coupe 7A?---No.

10 He then continues:

...so did not fit the dry eucalypt forest category recognised in Meggs and Munks.

15 On the basis that you say it was not found in a riparian patch of damp eucalypt forest, do you agree or disagree that it is within the dry eucalypt category?---It's definitely within the dry eucalypt category.

20 Thank you. Now, if I can then get you to look at paragraph 43, please?---Yes.

You will see that he says:

25 *Meggs and Munks concluded that these habitat attributes, that are listed in paragraph 42, represented the third habitat for the species was in the wet forest communities in which it occurred and reflected a requirement of the beetle for a relatively cool and moist micro-climate and a relatively mature forest structure.*

30 Do you agree or disagree with that?---I agree that the beetle certainly wants a relatively mature forest structure. I'm not too sure about the preferred habitat within wet forest communities, I mean that's no doubt that's the attributes that were identified where it was found in those particular areas, but I don't necessarily think that that's true across the range.

35 Paragraph 48?---Yes.

40 You will see that this is part of the criticism that is made by Mr Meggs about the absence of peer review for Dr McQuillan's - and indeed I think you had a hand in it - sampling 2004/2005?---Yes, that's right.

45 I won't stay to take you through paragraph 48 bit by bit, but what do you say to the criticism that there hasn't been a publication in a peer reviewed article - in a peer reviewed journal arising out of the 2004/2005 research?---Well, I'm a little bit surprised that Meggs could expect one so soon given that his paper with Meggs and Munks was published in 2003 and that was from research that was done in '97/'98. So as you can see - I mean it's quite accepted that there's generally quite a time lag between when research is done and when it's published. And also as far as I know that the work that Peter McQuillan is

doing is still actually work in progress. It hasn't actually been finalised yet, so it's unlikely to be submitted yet. But I mean there is always a fairly big gap in time, so I think expecting something to be published in a peer reviewed journal within a year, or less than a year, is quite sort of inconceivable really. It's not
5 likely to happen.

Is all research always published in peer reviewed articles?---No. I mean I myself have quite a huge amount of work that hasn't yet actually been published in peer reviewed journals, although I guess you could consider that a thesis is peer
10 reviewed in that it goes out to two external examiners. But yes I think there's a lot of research that happens, particularly in government departments, that never actually sees published journals. Mostly again because of time and resource requirements.

15 Thank you. Can I then direct your attention to paragraph 53 and again I won't stay to read it all to you, but you will see there that Mr Meggs says about five lines down:

*At least one sampling site in one forest type was located within 200
20 metres of another forest type, ie within the believed dispersal capabilities of the species of around 200 metres. Hence it's not safe to conclude from the trapping of a single latidens in dry eucalypt forest within 40 metres of wet eucalypt forest that this is evidence of a
25 breeding population of latidens in dry forest.*

Do you agree or disagree with that observation?---Well, I disagree with the observation and I'm also surprised that Jeff Meggs made it, because his own work and the locations that he puts up for latidens shows that quite a large number of the sites are actually wet forest/dry forest interface. And there's no -
30 again you can't be sure from that exactly whereabouts the location is.

Thank you. Can I then get you to direct your attention to paragraph 54? Again, I won't stay to read it out verbatim to you, but you will see that that is again a criticism of the failure to publish a peer review. Do you have a similar
35 response to that as you do to paragraph 48?---Well, absolutely, I mean, it might have only taken seven months from submission of the manuscript but it took sort of five years - five or six years from the time of research to the submission of the manuscript which is quite a big gap.

40 Could you look at paragraph 55, please, which is in a similar vein? It seems to draw a distinction between peer reviewed information and non-peer reviewed information. Do you agree or disagree with that distinction?---Oh, absolutely disagree, I mean, while ideally it would be great to have all information peer reviewed, I believe that we shouldn't be waiting for that to happen, we should
45 be operating on the best information that we have whether that's peer reviewed or not. I don't believe that we should be sending a species to extinction on the basis of waiting for a paper to come out.

Paragraph 57, there is a suggestion there that the individual trapped by Dr McQuillan in dry eucalypt forest was a vagrant. What do you say about characterising that particular beetle as a vagrant?---Vagrants are always quite a difficult thing to determine really because by nature - most often when you find
5 species it's very hard - unless you actually find them quite inconclusively, that there is some breeding or something like that, it's very hard to determine exactly where they come from. I don't believe it was vagrant - well, if it was vagrant it certainly wasn't vagrant very far because Meggs has sort of said that they only disperse 200 metres at the most and certainly on current information we would
10 probably - I would probably agree that that was probably about the limit. So it hasn't come very far and also, you know, I think his own work, really, there's no - when you're only finding one or two individuals, it's very difficult to determine, but I don't believe that he can apply - say, that this is vagrant without saying that that is quite likely for other locations to where he found the beetle as well.

15 Including in the transition zone between wet and dry?---Including the transition zone. Again, we just don't know which side of the transition zone they really wanted to be.

20 Yes?---And I think I did mention possibly to you that given that this is sort of the time of year when the beetles are actually out dispersing - looking for mates, it's likely that they are in a sense vagrant.

25 You will see there is a reference to - a little later in that paragraph - two male specimens of another beetle that were caught in pit-fall traps in a 30-year old pine plantation during a preliminary survey. Would you agree that in those circumstances where there is a beetle in a pine plantation that it is appropriate to regard them as vagrant?---I would certainly come to the same conclusion, but mostly because there has been a considerable amount of research that shows
30 that they don't actually - that they're unlikely to inhabit plantations.

Thank you. Incidentally, did you have any cause to have any involvement in the research which is being referred to there by Mr Meggs?---Yes, as he mentions there, I was a referee for the manuscript and I actually recommended that it not
35 be published because I believed that there were major omissions in the work.

And when did you do that?---I'm not sure, that's probably three, four years ago.

40 Paragraph 61 again returns to the theme of dry eucalypt forest and rejects this conclusion that it should be considered. You would disagree with that, I assume?---Yes, I disagree with that and I'm actually surprised that they made the conclusion because with only one third of the locations occurring in the model area and the other two thirds of the locations occurring in what is categorised by Forestry as dry forest I'm very surprised that that conclusion
45 could have been reached.

Paragraph 68, page 1212?---Yes.

It talks about:

5 *The importance of large, more than 50 centimetre diameter of coarse woody debris to the species is unknown due to the limitations of the log rolling sampling method. Meggs and Munks hypothesise that they may be important given the greater surface area of potential micro habitat they provide but this required further investigation.*

10 Do you agree or disagree with that?--I agree that it's unknown at this stage and I certainly agree that they're probably likely to be quite important. My own research has shown that places where I found the beetle - and it's interesting that I found a lot of female beetles in my studies and they were predominantly found alongside really very, very large logs, way bigger than greater than 50 centimetres in diameter and it might be that large logs are very important for the
15 females because as Meggs pointed out they actually breed in the interface between the log and the ground. So large logs might be particularly important in a dry forest environment.

20 Thank you. Could you look, please, at paragraph 91?---Yes.

And you will see it refers to:

25 *2003 Meggs and Munks papers as having presented an update of assessment of the conservation status of latidens and concluded that this species still met the criteria for an endangered taxon under the Tasmanian legislation and by inference the Commonwealth Act. In the absence of mitigation measures we noted that the perceived threat to the species of extensive conversion of native forest to plantation had not materialised on State forest with less than 1 per cent of potential habitat subject to this practice in the future. We identified that the CBS, -*
30

and that is clear fell burn -

35 *silviculture regimes, intensive management of regrowth forest in post harvest firewood collection as the major remaining threats to the species.*

40 Do you have any comment in relation to that paragraph?--I certainly agree that the silviculture regime is going to be a major threat to the beetle. Certainly, conversion to plantation is even more dangerous because obviously there's not going to be any return of the forest to that initial habitat. So that's going to have implications. In the longer term really, not in the short term because obviously in the short term loss of habitat is really the biggest problem. Yes, so
45 I mean, I agree that it still meets all the criteria and that means that we shouldn't be doing anything at all that's likely to push the species that step further.

Could you direct your attention please to paragraph 93 and particularly the table or the tabulated data which is contained there?---Yes.

5 Firstly, what do you say in relation to the degree to which the habitat of the beetle has been, or is present in comprehensively adequate representative reserves?---I think looking at the map there is only a couple of locations that actually occur in the reserves. If we exclude Maria Island, which obviously has sort of quite a large area of what Meggs has called potential habitat but then again as I said I don't believe that we should be using Maria Island as an idea
10 that that is a secure reserve population. I think we should be keeping that completely separate and treating that as a separate case and looking only at the mainland and it is quite obvious that the beetle is very insecurely reserved.

15 You will see that Mr Meggs has included the 520 hectares of Maria Island National Park within the total CAR reserves of 1630 hectares. Do you agree or disagree that it should be included as a CAR reserve for the purposes of considering conservation of the beetle in Wielangta?---No, I don't think it's a reserve at all, in that sense, for the beetle in Wielangta.

20 Thank you. Can I direct your attention to paragraph 94 please?---Yes.

HIS HONOUR: Just before you do that, are you likely to be some time, Mr Tree?

25 MR TREE: No.

HIS HONOUR: How much longer do you think you will be?

30 MR TREE: I think I will probably be another 10 to 15, your Honour.

HIS HONOUR: I think is any one going to be prejudiced by my earlier indication of a 12.30 break? I am happy to sit on if everyone else is happy to sit on.

35 MR TREE: The prospect of an early minute I think is attractive to everyone, your Honour.

Paragraph 94, you will see it reads:

40 *Within the last 10 years an addition to the complete loss of 190 hectares of potential habitat throughout its range, a further 106 hectares of habitat on State forest has been logged, approximately 3 per cent of potential habitat of which 91 hectares were the subject of CBS forestry. This time span encompasses the entire period latidens*
45 *has been listed under the Tasmanian Act and the four years it has been listed under the Commonwealth Act. During this period levels of potentially threatening activities on state forest have remained well*

below the thresholds required for listing of a species both under TSPA and EPBCA.

5 Do you have any comment in relation to that?---I believe that it is extraordinary that sort of logging 3 per cent of the potential habitat is not considered threatening activity and also if you go onto paragraph 95, another - so that was in the 10 years past and then another 5 per cent. That is 10 per cent of the species habitat, potential habitat, is being logged and that is not considered a threatening process. I find that extraordinary.

10 And that is even including the Maria Island figure?---Yes.

15 If one were to exclude the Maria Island figure the percentage would be higher?---Absolutely. That could possibly come down - well, take out the Maria Island that is sort of about one-third, you know, probably 15, 20 per cent or more of the habitat that has just disappeared which could have catastrophic consequences.

20 Dr Michaels, I have taken you to the minutes of the meeting in 1997 in which you are recorded as having expressed a view that there should be no logging on beetle habitat until further research has been done. Has your view changed?---Absolutely not. I think that we still know way insufficient to be able to make sure that this species doesn't go extinct.

25 I have finished with the Court books, your Honour, but could the witness please be shown exhibit H?--- Yes.

30 I should tell you that if you look at the first page of that exhibit you will see that it is a draft affidavit of Mr Meggs?---Yes.

And I wanted to direct your attention to some paragraphs that you may not have previously seen. Could you turn to paragraph 97 of it please?---Yes.

35 You will see paragraph 97 - and I will take it sentence by sentence - reads as follows:

40 *Our lack of understanding of the impacts of clear fell, burn, sow forestry on local populations of latidens and our uncertainty as to if or when regenerating forest after clear felling becomes suitable and sustainable habitat for the species, represents the great impediment to ensuring the long term conservation of the species.*

Do you agree or disagree with that statement?---No, I absolutely agree.

45 *Currently we cannot clearly say whether the mitigation measures developed for this practice are warranted let alone whether they are effective or adequate.*

Do you agree or disagree with that?---I certainly agree with that too.

5 *Meggs (1999) identified that there were sufficient coupes within potential habitat that have been subjected to CBS forestry over the last 25 to 30 years to construct a study examining the presence and relative abundance of latidens in a chrono-sequence of coupes. To my knowledge this research has not been initiated.*

10 Do you agree or disagree with that?---As far as I know the research certainly hasn't been initiated.

And the material is there available for the research to be undertaken if somebody were to do so?---Yes, that's right, the material is there.

15 Thank you. He then continues, paragraph 99, can I direct your attention:

To my knowledge no effectiveness monitoring program has been implemented for latidens.

20 Do you agree with that?---Absolutely.

He continues:

25 *However, I am aware that the Forest Practices Authority has been developing an effectiveness monitoring program for a range of fauna. Effectiveness monitoring for biodiversity or threatened species conservation is very much an emerging science so the Forest Practices Authority is to be commended for developing such a program.*

30 Do you agree with that?---I would have to have a look and see what the program actually involved before I could say but certainly ongoing monitoring is essential.

35 He then continues in paragraph 100:

Hence the implementation of an adaptive management strategy for the conservation of latidens can be considered to be somewhat patchy.

40 Do you agree with that?---Yes.

Given that the conservation management strategy developed for the species is dependent on such an approach this is something that urgently needs to be rectified.

45 Do you agree with that?---Yes.

And then you will see there is a sentence that has been crossed out:

The longer the status quo of conservation management for this species is maintained the higher the risk of extinction to the species based on current knowledge.

5 Do you agree or disagree with that?---I agree with that.

Thank you. Now, as I understand it my friend will be cross-examining this witness for some time and I think there was a discussion yesterday between Ms Mortimer and your Honour and another counsel that in those circumstances it was inappropriate that her cross-examination should commence today.

10 HIS HONOUR: Yes. Dr Michaels, that is the conclusion of your evidence-in-chief unless there is any other matter that may be wanted to be raised on reflection in February by Mr Tree so your further evidence will take place in February.

15 MR D. GUNSON: There is one matter I would like to raise, your Honour, very briefly. With respect to the capture of the beetle I think in coupe 7A which arises from the discussion about paragraph 38(c) of Mr Meggs' affidavit, I make a call for the production by this witness of her field notes relating to that matter.

HIS HONOUR: Yes.

25 MR TREE: I will investigate that with her during the break, your Honour.

HIS HONOUR: Yes, thank you. Right. Is there any other issue that needs to be discussed?

30 MR TREE: Not in relation to this witness but my friend apparently has something else that he wants to raise.

HIS HONOUR: Dr Michaels, if you feel more comfortable in the body of the Court you can go there?---Thank you.

35

<THE WITNESS WITHDREW [12.38pm]

40 MS MORTIMER: Your Honour, might we have permission to uplift the hard drive so that the viewing and drilling can take place?

HIS HONOUR: Yes.

45 MS MORTIMER: And permission to uplift exhibits P and Q which are the photographs tendered to Mr Kennedy yesterday and about which copies need to be made?

HIS HONOUR: There is no problem with any of that?

MR D. GUNSON: No problem, your Honour.

HIS HONOUR: Yes, certainly I grant leave for that to occur.

5

MS MORTIMER: Thank you.

HIS HONOUR: If there is any issue about the hard drive that relates to, or would affect the timing of the evidence of Mr Mooney, I would appreciate it if my staff could be informed then we could keep him posted about when he would likely be required to give evidence. If there is nothing else, I wish everyone involved in the case a very happy and safe Christmas and New Year and the Court will adjourn.

10
15

**MATTER ADJOURNED at 12.09pm UNTIL
MONDAY, 6 FEBRUARY 2006**

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NONE REQUESTED