

TRANSCRIPT OF PROCEEDINGS

O/N 2360

FEDERAL COURT OF AUSTRALIA

TASMANIA DISTRICT REGISTRY

MARSHALL J

No TAD 17 of 2005

ROBERT BROWN

and

FORESTRY TASMANIA and OTHERS

HOBART

10.02 AM, FRIDAY, 9 DECEMBER 2005

Continued from 8.12.05

DAY FOUR

**MR 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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5 <CROSS-EXAMINATION BY MR D. GUNSON

HIS HONOUR: Yes, Mr O'Bryan?

10 MR O'BRYAN: Your Honour, the CD with the maps from the opening which
was discussed yesterday, your Honour made an order yesterday that the parties
could uplift, for the purposes of solicitors and counsel only. Those from the
department who are present in Court, your Honour, would like to be able to
15 communicate about the case and the opening and so forth to their superiors in
Canberra and I have agreement from all parties that provided that is the only use
to be made of a copy of the CD which we have that that is acceptable to them,
could I therefore ask your Honour either to extend the leave for that purpose or
give us the benefit of an exemption, as it were, to enable that communication in
Canberra to occur.

20

HIS HONOUR: I am happy to extend the leave if that is convenient to
everybody else, there is no contest about that?

MR O'BRYAN: No, everyone is content, your Honour.

25

HIS HONOUR: Yes. Thank you. I should also apologise for my lack of
foresight. It is because I haven't done a long case for a while but I remember as
counsel doing long cases interstate and what the Industrial Relations
Commission used to do was sit Friday hours. Now, because of a lunch
30 commitment today I can't do that but in future, although I will have to, for my
staff's sake at least, adjourn no later than a quarter to 4, instead of 4.15 this
afternoon but on any future Friday when we sit here on this matter I will sit 9.30
to 12.30, 1.30 to 3 so you still get the four and half hours but it is an early start
and a truncated lunch which will enable people to get back to where they came
35 from for those of us who have come from elsewhere.

MR O'BRYAN: Thanks your Honour. We are all migratory species or many
of us here.

40 HIS HONOUR: Yes. Mr Gunson?

MR D. GUNSON: Thank you, your Honour. I am not sure what my friends
are in terms of migratory species. I will not inquire further at this stage.

45 HIS HONOUR: I must admit I did contemplate welching on my lunch
commitment today and starting at 9.30 and then I remembered Registrar Parrot
had this room at 9.30 so it was an impossibility.

MR D. GUNSON: The first thing, your Honour, I knew the application to produce from yesterday to produce the instructions from FitzGerald and Browne to the witness, Ms Underwood. I think that document can now be produced.

5

MR TREE: I think it was produced, wasn't it?

MR D. GUNSON: I now tender that, your Honour.

10 HIS HONOUR: That is exhibit 4.

EXHIBIT #4 INSTRUCTIONS TO MS UNDERWOOD FROM FITZGERALD AND BROWNE

15

MR D. GUNSON: Ms Underwood, in your report which is attached to your affidavit you make no reference to any other person perhaps having assisted you in the preparation of that report, do you?---No.

20

Did anybody assist you to prepare the report?---Can you please define what you mean by assistance?

25

Help you. Give input. Not a particular difficult word?---In terms of the structure of the report or the content?

Well, let us start with the structure. Did anybody give you any assistance of the way in which the report should be structured?---No.

30

Anybody give you any assistance with respect to the content of the report?---I may have asked questions of people along the way but that was - - -

35

Did anybody give you any information that is incorporated within the report?---Well, I asked for assistance and I was given information.

Yes. Well, from whom did you request assistance?---Mr Dell, I asked to do some GIS analysis.

40

Yes. And anything else that you asked Mr Dell to supply to you that you incorporated in the report?---Just the associated maps which is associated with the GIS analysis.

45

Right. And did anybody else provide you with any information that is contained in the report excluding formal references such as papers to which you have referred?---So information other than what I had referenced?

Yes?---Not to my recollection.

All right. And did you make any reference in your report to Mr Dell providing you with information that is incorporated in the report?---No, I did not.

5 Why not?---Because the data that Mr Dell was using was that of Forestry Tasmania so I thought it was appropriate that the data should be attributed to the data custodians.

10 Do you regard yourself as part of a team of people retained to give evidence in this matter?---No, I do not.

So you are not part of a team. You regard yourself as a sole contributor, as it were?---That's correct.

15 Do you regard yourself as an advocate for Senator Brown?---No, I do not.

20 We spoke yesterday about your involvement in protests against Forestry Tasmania. I don't intend to go back through those again. Did you think it was necessary to perhaps disclose that material information in the body of your report?---Disclose the information that I was involved with?

Yes, to disclose to the Court that you had been an activist involving demonstrations against Forestry Tasmania, the respondent in these proceedings?---Not in the report, I don't think that's appropriate.

25 And do you think that you had disclosed your full involvement in the affidavit?---Not in relation to Forestry Tasmania.

30 No. Your sole disclosure is to say that you are opposed to logging in the Wielangta forest area and that you support campaigns to stop logging in that area. That is a very limited disclosure, isn't it?---Well, not really because the entity that carries out most of the logging in that area is Forestry Tasmania, so it goes without saying I imagine.

35 It goes without saying what?---Well, as you said I didn't mention the fact that I had concerns with Forestry Tasmania.

But you do have concerns with Forestry Tasmania and you have concerns about its operations and methods, don't you?---Yes.

40 Yes. Now, didn't you think it was necessary to disclose that in the affidavit when purported to be an expert witness in these proceedings?---Obviously not.

45 Well, did you discuss - - ?---Because I said that I was opposed to logging and as I said before that most of the logging activities in Wielangta is actually carried out by Forestry Tasmania. So I didn't see it as necessary.

So you just thought you wouldn't mention those matters and hope they might not be raised?---No.

Well, you decided not to mention them, didn't you?---It was not a conscious decision.

5 Thank you. Do I understand from your evidence yesterday that your general opposition is to clear felling as opposed to selective logging?---My general opposition relates to - I have concerns with how Forestry Tasmania manage their properties.

10 You have concerns about how they manage their property. What am I to understand from that?---I have concerns about how Forestry Tasmania manage State forest and I have concerns with clear felling and - yes.

15 But your concerns about clear felling would, I imagine, alter depending on where the clear felling was to take place?---Well, it depends, I guess, on what forest type you're talking about.

That is right. Whether we are talking about old-growth forest or other types of forest. Is that a fair comment?---How do you mean?

20 Well, it is a reasonably straightforward question, isn't it? You may oppose logging of the clear felling prescription in one area but not oppose it another area if the forest types are different?---Well, yes.

25 Yes. Your primary concern, I suggest, is clear felling of old-growth forests?---My primary concern is how Forestry Tasmania - well, the management practices of forestry in Tasmania.

30 Are you opposed to selective logging at Wielangta?---Can you, please, define selective logging?

35 Yes. Not taking all of the trees just taking a portion of the trees from the area, that is, trees that are selected as being suitable for saw logging?---So are you talking about a - what percentage of cover are you talking about being selectively removed?

It depends on the size of the coupe and the suitability of the timber?---Well, it's difficult for me to say as a generality.

40 Do you believe that Forestry Tasmania is actually harvesting the timber, that is, engaged in forestry operations itself?---Forestry Tasmania?

Yes?---Harvests timber, yes.

45 So you believe Forestry Timber is going to harvest, that is, actually be responsible for the removal of the timber on coupe WT019D, do you?---Not necessarily. It could be - the harvesting could actually be done by a contractor who isn't necessarily an employee of Forestry Tasmania.

Do you understand how the harvesting process is arranged?---I have a general understanding.

5 Do you understand it to be that Forestry Tasmania contracts with what is called the principal processor, and the principal processor is given effectively a licence to remove the timber in accordance with the Forest Practices Plan? Do you understand that to be the process?---I understand that to be a component of the process. I don't know if Forestry themselves ever harvest the timber.

10 Would it be fair to say that you have read the Forest Practice Plan with respect to WT019D?---I think I have read a - I may have read a draft version. I've got copies of the plans that - and I can't recall exactly, but I think that I have read 19D.

15 Well, if you have read 19D no doubt you will recall that that forest plan provides that the principal processor is to be Gunns Limited?---I can't remember.

20 Could the witness be shown this document, please? Pass that to the witness if you would, please? Now, I am sure you have seen that document before, haven't you?---I don't know if I've seen this particular document. This is the final version or a draft version?

25 It is the final version?---I don't know if I've seen a final version or a draft version in the past, and some versions of the Forest Practices Plans I have seen they've had the contractor blacked out, so it's not possible to see who the contractor is.

30 Well, it is pretty obvious to you what you have been shown is a Forest Practices Plan for coupe WT019D, isn't it?---Correct.

Yes. And that clearly shows that the principal processor is Gunns Limited?---Correct.

35 And who is the name of the contractor?---A. and B. Nominees Pty Limited.

40 Right. Now, is it your understanding that Forestry Tasmania licences Gunns Limited in respect of that coupe to take the timber, and the contractor is then a completely separate entity?---It appears so.

Now, you have looked at a lot of Forest Practice Plans, and before that Timber Harvesting Plans, haven't you?---Correct.

45 And you would have seen that that is the policy throughout, that Forestry licences the principal processor to take timber, and the principal processor subcontracts it then to a felling company?---The plans - - -

That is the usual practice, isn't it?---Well, the plans that I looked at frequently had the principal processor blacked out, so it was not possible for me to tell who was actually the processor or the contractor.

5 Was it your understanding, or your belief, more correctly, until today that Forestry Tasmania actually engaged in the harvesting operations itself?---Not in these particular coupes.

10 Or in other coupes?---As I said before, I know that coupes are harvested by other contractors other than Forestry Tasmania, and I was not sure if Forestry themselves actually engaged in any harvesting.

You didn't think it necessary to make some inquiries to find out?---No.

15 If that document could be returned to me, please. While we are on the subject of Gunns Limited, have you ever protested or demonstrated against Gunns Limited?---Specifically Gunns?

20 Yes. They are one of the major timber companies in the State, aren't they?---Yes. But I don't - from my memory I don't think I have protested specifically about Gunns, and what are you actually defining as protesting?

25 Oh, demonstrating, demonstrating in the streets, demonstrating perhaps outside Parliament, demonstrating outside Gunns premises?---I haven't demonstrated outside Gunns premises, and as I said yesterday I have protested, and it's been generally about forest practices in Tasmania, which obviously includes Gunns as part of that scenario. So from the best of my ability to remember, I can't remember specifically protesting against Gunns Limited.

30 Is that because you have been involved in so many protests that you just can't remember which ones were dedicated to some particular cause?---No. Because I don't think that I have been to a rally that was specifically targeting Gunns.

35 Not even when Gunns commenced proceedings in the Victorian Supreme Court against a considerable number of people?---I have not had anything to do with the Gunns 20 case.

All right. Do you have the Court book in front of you?---Yes.

40 Could you turn to page 518, please?---Sorry, what page number?

518?---518. Yes.

45 Now, at the top of the page the word, "location", should be there. Do you see that?---Yes.

Then the word, "land uses," appears. This is the index to your report, isn't it?---Yes.

And in that heading, or under that heading of Land Uses you discuss the various reserves?---Yes.

5 Can I assume that you don't claim any expertise in land use per se?---What do you mean by land use per se?

Exactly that. Do you claim to be an expert in land use? It is not a particularly difficult question, Ms Underwood?---Well, what I am thinking about is if you're looking at broad land use, or are you looking at it more specifically, like, for example, are you looking at land use that's all over Tasmania. Are you looking at land use in a particular area?

15 Could I confine it to the matters that are addressed in those sub-paragraphs, formal reserves, informal reserves, State forest, State forest coupes, State forest un-couped, and private property? Are you claiming to have some expertise in those matters, or are you merely reporting effectively what you have extracted from documents?---I am reporting what I have extracted from documents, but when I worked - helped write the State Environment Report for Tasmania we looked at land use within Tasmania. It was one of the issues. So - - -

20 But you don't claim to be an expert - - -

HIS HONOUR: Just a moment.

25 MR D. GUNSON: I am sorry, your Honour.

HIS HONOUR: Can you complete your answer to the question?---So I have had some experience in looking at land use issues across Tasmania, so - - -

30 MR D. GUNSON: And when - keep going. Sorry?---So, yes. So I am not specifically an expert in land use managed, in land use - defining land uses or managing for different land uses.

35 Do you regard yourself as an expert in natural values, and in particular those matters that are identified under that heading?---Sorry, under the Land Use heading?

40 No, under Natural Values?---Under Natural Values, sorry. Well, in regards to flora, that was what I did my Honours thesis on. With the - so I have a lot of background in flora issues. In relation to threatened species, my Honours thesis looked at the conservation status of vegetation on Flinders Island in Bass Strait, so that required me to look at threatened species as well as endemic flora and looking at plant communities and different ecological communities. And I also wrote the threatened species and ecological communities issue report for the state of the environment. So I've had - and I've been working in the natural resource area for 10 years.

45 Let us just go through the various items under Flora?---Yes.

Do you claim to be an expert in threatened flora?---I have a working knowledge of threatened flora, yes.

5 But you don't claim to be an expert in that subject?---Well, I would be considered an expert, yes.

All right. What about endemic flora; are you an expert in endemic flora?---Yes.

10 Have you published any works on threatened flora?---I haven't published anything, except for I have written a thesis which included threatened flora on Flinders Island.

15 Have you published any papers on endemic flora?---Again, my thesis would have included endemic flora.

But it is unpublished?---That's correct.

20 And are you an expert in flora species diversity?---That would have been a component of what I looked at on Flinders Island.

But I am asking you whether you regard yourself as a flora species diversity expert, not that you have an understanding of it but do you regard yourself as an expert in this area?---Yes. Yes, I have a lot of knowledge.

25 There is a difference between a lot of knowledge and being an expert, isn't there?---These headings were pulled out from a database in relation to values identified in the Wielangta area by other experts. I was merely reporting on other experts. So I don't understand, as they are all sourced to a particular other source other than myself.

30 I wonder if you would now answer my question?---Yes.

35 Do you claim to be an expert in flora species diversity?---I have an understanding and I have studied that on Flinders Island and I have been interested in plants for a long time. So I would regard myself as an expert.

And do others in the scientific community in which you work - no, I will withdraw that. Plant community richness; are you an expert in that field?---No.

40 And in significant ecological communities; are you an expert in that field?---Yes. I have some working knowledge of ecological communities.

45 There is a distinction between having some working knowledge and being an expert in the field, Ms Underwood, isn't there?---I've had experience working in that area but - - -

Do you or do you not claim expertise in that area, Ms Underwood?---Yes.

You claim it?---Mm.

Have you published any papers about significant ecological communities?---No.

5 When and where did you gain your expertise in significant ecological communities?---Well, when I was studying the vegetation of Flinders Island it was about looking at why vegetation communities grow where they do, and a part of that was looking at the conservation status of those communities. So more significant communities form the basis of why particular areas should be concerned or why they shouldn't be.

10 How long were you on Flinders Island conducting that study for?---My study took a year but I wasn't on the island the whole time.

15 And if I suggest that you weren't on the island for a great degree of time you wouldn't argue about that, would you?---I was on the island for six months and conducted my research specifically on plant communities for probably two to three months of that.

20 So having done that on a Bass Strait island you now claim to be an expert in significant ecological communities; is that correct?---Yes, through my experience on Flinders Island.

25 All right. And you certainly wouldn't claim to be an expert in old-growth forest, would you?---No.

Now, if we can quickly look at fauna. You don't claim to be an expert in fauna, do you?---I have done some threatened fauna work but it's very limited, so I have a very broad working knowledge of fauna issues.

30 Do you claim to be an expert in fauna?---No.

Thank you. Under the next heading we have Refugia. Do you claim to be an expert in this subject?---No.

35 Under Threats, do you claim to be an expert in threats that you have identified?---Not specifically.

40 On the next page we have the broad-toothed stag beetle. You are not going to suggest that you are an expert on the broad-toothed stag beetle, are you?---No.

And where you are in conflict - if indeed you are in conflict - with Mr Meggs would you agree that he is far better placed to provide an opinion to this Court than you are with respect to the broad-toothed stag beetle?---Yes.

45 And in that regard you would accept that in respect of its habitat needs that he is better placed to provide an opinion than you?---Yes.

As to its numbers in the wild you would accept that he is better placed to provide an opinion than you?---Yes.

As to the dangers that might face it you would accept that he is in a far better position to provide evidence than you?---Yes.

5 And in generally anything to do with the stag beetle you would defer to his opinion, would you not?---Yes, his and other's.

But in particular his opinion because he is the leading expert in that field, I suggest?---He's one of the experts in that field.

10

He has published two well regarded papers, I suggest, with respect to that beetle. In 1999 his own paper and then the paper in 2003 in collaboration with Munks?---Correct.

15 Have you read those papers?---Yes.

And you would no doubt as a scientist yourself regard them as well researched?---As I'm not a fauna expert I'm not in a position to be critiquing his work.

20

No. And it would be inappropriate for you to do so, wouldn't it?---Yes.

Because his qualifications far exceed those that you possess?---Yes, in regards to the beetle.

25

Yes. Well, indeed his academic qualifications exceed yours, don't they?---He has a doctorate.

30 Yes. Now, if we move down the page, please. You believe him to have a doctorate, do you?---Well, I don't know what qualifications - is he a doctor, I don't, can't remember.

You really don't know, can't remember?---Well, I think he's a doctor. So therefore his qualifications are better than mine.

35

Do you have a Masters degree?---No.

40 All right. Now, if we look then down the page to Forestry Tasmania's planning system. You don't claim to have any particular expertise in Forestry Tasmania's planning system, do you?---No.

And what you have included in your report is basically an extraction prepared by you from various documents that you have been given; is that right?---Not necessarily what I have been given.

45

Or you have had access to?---Yes.

For instance, you have read the Forestry Act?---I have looked at components of it.

Well, you haven't read the whole Act?---No.

5 That is the very Act that dictates how Forestry Tasmania will operate, isn't it?---Yes.

That is the Forestry Act 1920?---Yes.

10 But you haven't read the whole of the Act?---No.

Have you read the whole of the RFA?---No.

Have you read the RFA at all?---I have read parts of it.

15 What parts did you bother to read?---I remember table 29.

Is that all you have read?---No, I have read other parts of it over time, but I can't remember exactly what I have read and what I haven't read.

20 All right. But you would agree that you haven't read the whole of the document?---No.

And if I was to suggest to you that you had probably read only very little parts of the document you wouldn't disagree with that, would you?---Not necessarily, it was one of my questions I had to look at for my Honours degree so I would have had a look at more than just little bits of it.

25

What about the management decision classification? Do you understand that process?---From what I have read, yes.

30

What did you read?---I read about the fact that there's two - there's a primary zone and a secondary zone and it forms the basis - well, forms part of the basis of the decision-making process within forest management.

35

And with respect to the balance of the matters identified on that page - and I will quickly identify them, forest management plans, provisional coupes, strategic wood production planning, three-year wood production plans, and coupe data, I imagine you were either given all of that material by somebody or acquired it yourself?---I acquired it through - I need to look at the source, but I

40 wouldn't have been given it.

But in some way you have obtained the material from a source?---Yes.

45

And the same with road construction data and the forest practice plans that are referred to on the next page?---Three-year wood production plans, yes.

So what you have done if I understand you correctly is you have looked at some of the documents, you may have read some more thoroughly than others, is that a fair assessment?---Yes.

And you have tried to put together your understanding of those documents in the form of your report and in particular your tables. Is that a fair comment?---Can you clarify that question?

5

Yes. We can understand your report to be basically a compilation by you of information that you have extracted from those documents we have just spoken about?---Which documents?

10 The ones that are identified from under the heading Forestry Tasmania's Planning System?---And the question is?

Is your report your compilation of information you have extracted from those documents?---Not just those documents.

15

Well, what other sources did you use that are not identified under the heading Forestry Tasmania's Planning System?---Are you talking about sources specifically only relating to Forestry Tasmania's Planning System or are you talking about my whole report?

20

I am talking about Forestry Tasmania's Planning System, just confine yourself to that will you?---Okay.

25 Now, if you confine yourself to that we will move along much faster.

MR TREE: And we will move along much faster if we don't have gratuitous comments as well, your Honour.

30 MR D. GUNSON: To assist you, Ms Underwood, could I just ask you to look at the items that are identified under Forestry Tasmania's Planning System and tell me this, it is a very simple question: did you look at any other documents other than those that are identified there under that heading for the purpose of preparing your report?---As I just mentioned before that I was going to have a look at the sources that I'd wanted - that I used and I was just about to check that. The sources that I've used are outlined in my report.

35

Yes, well you take me to them and tell me what additional documents or sources you used as the basis for what you have written on the subject of Forestry Tasmania's Planning System?---Other than where it is stated as
40 Forestry 2001B or other sources that I've identified like AFA. Where I haven't actually stated a reference within that, within my text, for example the three year wood production plans, the text under that, that's come from Forestry Tasmania's website from my memory, except for, "Forestry Tasmania has been publishing three year wood production plans since 1994," I think I worked that
45 out after having trying to find all the three year wood production plans and discovered they weren't published prior to 1994. And the information that I have outlined under coupe data, that's all come from the actual three year wood production plans themselves. And the information on the datum has come from

- that's just general knowledge. Other than - and the contingency coupe information I think I obtained from some Forestry Tasmania - - -

5 Ms Underwood, would you agree with this proposition that there is nothing original in your report under the heading Forestry Tasmania's Planning System and that really all you have done is extracted information from various reports and compiled it?---Yes.

10 You would agree with that?---Yes.

And you would also agree that you may have made some errors in compiling information from those reports?---Perhaps.

15 Yes, well you identified some issues yesterday didn't you?---Yes.

And, I am not criticising you, but do you accept that you made errors in reproducing that material because of perhaps a lack of understanding of what was involved with the processes?---Yes, I could have done.

20 Yes. That is a fair assessment isn't it?---I tried to find out as much information as I could that was publicly available. It would have been a lot easier for me to go directly to Forestry Tasmania themselves.

25 I am sure that is so, but do you accept that your report suffers from the problems that I have identified?---Yes, they do, but part of the problem is I said that it's difficult to get access to information from Forestry Tasmania.

30 Have you read the affidavit filed in these proceedings by Mark Wapstra and sworn on 22 November?---No.

You haven't? Just bear with me, your Honour. Book 5, 1925, your Honour.

If you would have a look at page 1925 please, Ms Underwood?---Yes.

35 Do you have in front of you an affidavit by Mark Wapstra, an ecologist?---Yes.

40 If I could ask you please to turn to page 1980, do you see there a subheading Affidavit of Sophie Clementine Sorell Underwood Affirmed 18 October 2005?---Yes.

In that paragraph Mr Wapstra says:

45 *In my opinion, Ms Underwood has used outdated sources of information with respect to management recommendations for threatened species, eg, para 16, references to Bryant and Jackson 1999, for management recommendations for commercial operations. The most up to date prescriptions for threatened fauna are delivered through TFA, not the Bryant and Jackson 1999.*

Do you understand the reference to TFA to be a reference to threatened fauna adviser?---Yes.

Do know what the threatened fauna adviser is?---Yes.

5

Could you tell his Honour what your understanding of the TFA is?---My understanding is that it's not publicly available unless you are a forester, and it's a - I think it's a data base where you make decisions and you fill in things, and you go down. It's like a flow chart, and will take you to a specific prescription for that particular species.

10

Have you ever had access to it?---No.

Ever seen it in operation?---No.

15

What is the basis for your understanding of it?---From what I've read about it.

Thank you. Would you accept what Mr Wapstra says is correct?---Yes.

20

So we can accept paragraph 154 is a correct statement by Mr Wapstra?---Yes.

Thank you. Could I ask you, please, to come back to the index that we discussed a moment ago, under the heading Wielangta and Forestry? You have set out under the - - -?---Sorry, can you wait?

25

Yes, I am sorry. Just go back to that?---Okay. Yes.

You have 520 in front of you now?---Mm.

30

Under the heading Wielangta and Forestry you set out the logging history; is that correct?---Yes.

And no doubt you referred to a significant number of sources to try and find out the long logging history of Wielangta?---With that component I was just trying to get an overview of some of the logging taking place in the Wielangta in a very short paragraph, so from memory I looked at a few references, but not hundreds.

35

But it was your understanding though that Wielangta has a very long logging history?---Yes.

40

Probably going back 100 years or so?---Yes.

Have you read the affidavit of Jonathan Brett Warren that has been filed in these proceedings?---No.

45

I wonder if the witness could be shown, please, that document, volume 5, page 2119? You could take a few moments to quickly review that affidavit, but I

could ask you to turn in particular to page 4, 2122, Ms Underwood?---2122?
Do you want me to read - - -

5 I would like you to move from that page then on to page 5, 2123 and 2124,
please. Just read them to yourself. Have you read those pages?---Sorry, yes.

10 You have finished, thank you. Did you consult Kostoglou 1991, or Ketelaar
and Kostoglou 1993 before preparing your report that deals with the logging
history of Wielangta?---It looks like from my references that I must have only
consulted Kostoglou 1991.

15 So you didn't consult the second document to which I have referred?---I
imagine I would have listed it if I had, but to the best of my ability, I don't think
- to my memory I don't think.

20 Would you agree with this, that in those three or four pages that you have read
from Mr Warren's affidavit that he gives a far more detailed account of the
logging history of Wielangta than you do in your report?---Yes.

And that it is far more extensive?---Yes.

And yours is very much a potted or condensed version of the history?---Yes.

25 And if we really want to know what the history of Wielangta is we should really
refer to Kostoglou, or Ketelaar and Kostoglou. Is that a fair comment?---Yes.

30 Thank you. If I could take you please to the tables that you have set out in your
report, in particular at table 15 at page 551. Do you have that in front of
you?---Yes.

And if you move along the top please to where you see the heading Harvest
Method. Do you see that?---Yes.

35 On the first four items appearing thereunder you will see that under Harvest
Method you have, "Clear fell on road clearing" - - -?---Yes.

40 - - - in respect of each of those items. Am I to understand from your evidence
yesterday in-chief that you now accept that where, "Clear fell on road clearing"
appears that that should be deleted?---Why?

45 Because clear felling does not incorporate road clearing as part of the process.
The clear felling relates to the actual forest itself rather than the roadway for
calculation purposes?---I think I said yesterday that I - well, I included that
because when you clear a road you are clearing it completely so that is why I
referred to it as clear fell but if you are talking about clear-fell burn then that is a
different matter.

All right. Thank you for that. You have made the distinction clear to me. If I could take you back to page 550 to the table that appears there?---Yes. So that is the bottom half of table 14?

5 That is right. If you look then at item 30 that relates to coupe WT043D - the WT of course means it is Wielangta, doesn't it?---Yes.

Now, across in the column headed BTSSB Management Prescriptions you say that:

10

There is no management prescription in place for the broad-toothed stag beetle in respect of that particular coupe.

?---There is a footnote there.

15

Yes. Read the foot note?---it says:

The broad-toothed stag beetle was mentioned but no management prescription was recommended.

20

Yes. Was the broad-toothed stag beetle, to your knowledge, found in that area in the preliminary surveys that were done before the plan was prepared?---I don't know. All I was doing there was reporting on what I had read in the forest practices plan.

25

So your answer to my question is, "I don't know whether the broad-toothed stag beetle had been located in that particular coupe before the plan"?---I was purely reporting on information that was provided to me.

30 Right. And if I was to take you through other coupes you would give me the similar answer that you don't know, where you put "No" as part of the management prescription, whether or not the beetle existed in that coupe?---Correct.

35 Thank you. And you made presumably no inquiries to try and determine whether or not the beetle had been found in coupe 43D or any other coupes where a "No" is put there?---Correct.

40 Thank you. Have you read the Forest Practices Code 2000?---Yes, I have read parts of it.

45 Which parts did you read?---From memory I can't remember but I have recently been working on firewood management and looking at the legislation that currently relates to firewood management in Tasmania and that included the Forest Practices Plan so there would have been that part of it and I had read various other parts of it but I can't remember specifically.

So a fair response would be, "I have read parts of the document but I have not read it all"?---Yes.

Thank you. Can I take you please to table 6 which you will find on 531?---I have got it.

5 You make reference there to native fauna species known from the Wielangta area?---Yes.

And you refer to, and please correct me if my pronunciation is wrong, the rhabdotus reflexus, suggesting this beetle is normally found on the west coast of
10 Tasmania?---Correct.

Now, you say:

15 *Within Wielangta the species has only been recorded six times and the species appears to prefer wet rainforest patches.*

?---Correct.

Now, is this beast a broad-toothed stag beetle?---Not to my knowledge.
20

What is it then?---It is some kind of beetle but I am not sure what type.

No idea what it is?---No.

25 And you wouldn't know, for instance, whether it has been found also at the Arve and Picton Valleys?---No.

Or at Tarraleah?---No.

30 Or on Mount Wellington?---No.

So you really know nothing about it do you?---No, I was reporting on what Black et al had said.

35 Yes, reporting what somebody else had said?---Yes.

And you really don't know whether it is prevalent in Wielangta or not?---Only from the basis of what they said that it has only been recorded six times.

40 Where do you believe the Wielangta Refuge is that you refer to in your report?---I haven't actually seen the - an electronic boundary for the Wielangta Refuge, it's merely a refuge that is locally known as the Wielangta Refuge. And from what I have read, which I have listed there, that the heart of the refuge is at Wielangta Hill and Prosser Sugarloaf and the area is also said to contain Blue
45 Gum Spur, Cone Hill, Twamley Hill and Loafers Hill. And it says that, just reading from my report, that Cone Hill is the southern end of the refuge.

Is it a formally recognised refuge in some way or is it merely a local expression to describe an area of bush?---As I have said in my report, the core area was known by the local residents as the Wielangta Refuge.

5 And is this a recent naming by the residents or do you believe it to be a longstanding name?---My understanding is that it is reasonably longstanding.

All right. But apart from what you have written, that is the extent of your knowledge about the Wielangta Refuge; is that a fair comment?---Yes.

10 I have no further questions, your Honour.

HIS HONOUR: Thank you, Mr Gunson. Mr Tree?

15 <RE-EXAMINATION BY MR TREE [11.00am]

MR TREE: I wonder if the witness might have exhibit 1 before her, please,

20 your Honour.
That is the listing criteria for the EPBC Act in relation to the broad-toothed stag beetle, is it not?---That's correct.

25 My learned friend Mr Gunson asked you some questions dealing with the deletions that you made in evidence-in-chief in your report - - -?---Yes.

- - - in which you deleted the words relating to low densities and deleted the words relating to habitat loss?---Correct.

30 Do those concepts appear in relation to the listing for the broad-toothed stag beetle?---Yes. Well, they're outlined under criterion 2.

35 And can you direct his Honour's attention, please, to where they appear in the outline under criterion 2?---Yes, if you go to page 2 of 3 and it says - - -

Could you read that out? I think there is only one copy of that?---Okay:

40 *The major threat facing the broad-toothed stag beetle is habitat loss*
- - -

Perhaps if I could get you to start at the paragraph before, please?---Okay.
Right:

45 *Little is known about the population size of this species but there are indications that it occurs at very low densities compared to other Tasmanian Lucanids. Populations of these species appear to be highly separate and discrete.*

Can I just stop you there? Is that from where you sourced reference to the low densities that you have referred to but deleted in your report?---Yes. To the best of my memory, yes.

5 Thank you. And the next paragraph?---

The major threat facing the broad-toothed stag beetle is habitat loss, predominantly through clearing and forestry practices.

10 Thank you. Is that where you sourced the reference to habitat loss as being a major threat in your original report?---Yes, to the best of my memory.

15 Thank you. I wonder if the witness might have volume 1 of the Court book placed before her, please? And could I get you, please, Ms Underwood, to turn to page 363?---Yes.

You might remember my learned friend Mr Gunson asked you some questions by reference to Forest Practices Plan WT019D?---Yes.

20 And he asked you to identify in a document that he was showing you that the principal processor and contractor were identified?---Yes.

25 And can you see in the document that you have before you fields relating to principal processor and contractor about a quarter of the way down the page?---Yes.

They appear to be blacked out or whited out?---Correct.

30 Is that the condition that you saw Forest Practices Plans in or was it different?---I saw 40 plans, so individually I can't remember but generally I remember them being blacked out.

Thank you, your Honour. That is the evidence of this witness.

35 MR O'BRYAN: Your Honour, before the witness is excused might we look at that letter of instruction which we have not had an opportunity to see?

HIS HONOUR: Sorry, which?

40 MR O'BRYAN: Might we look at the letter of instruction - - -

HIS HONOUR: The letter of instruction, certainly.

45 MR O'BRYAN: - - - which I understand there is only one copy in Court regrettably, unless others have been made. We have not had the opportunity to see it all, your Honour. Your Honour, it is desirable to ask a few questions of Ms Underwood in the Commonwealth's interests arising out of this document. To do that it would be necessary to make some copies, your Honour, if it makes sense of it. It would be brief but we would - - -

HIS HONOUR: Do you want to discuss with Mr Tree the nature of those questions and see if there is any issue about whether you should be permitted to ask them?

5

MR O'BRYAN: Yes. The discussion would suggest, your Honour, that any question that I pose will be objected to. Thus it might be necessary to have some kind of voir dire, your Honour, on that issue. To have that voir dire we will still need copies of this document. It is most regrettable that there are none here to make sense of it at all. Your Honour will need a copy, other counsel will need a copy and we will need a copy, your Honour.

10

HIS HONOUR: We will stand the matter down briefly and you can let my associate know when you are ready and he may be able to assist you with the photocopying of the document.

15

MR O'BRYAN: If that is possible. We only need a few moments, your Honour, if we can get just get some copies.

20

HIS HONOUR: Yes, certainly. I will wait in the ante room.

<THE WITNESS WITHDREW

[11.07am]

25

ADJOURNED

[11.08am]

RESUMED

[11.16am]

30

<ON VOIR DIRE

35

HIS HONOUR: Yes, Mr O'Bryan?

MR O'BRYAN: Your Honour, the Commonwealth applies to briefly cross-examine Ms Underwood in connection with the instruction she was given for the purposes of preparing her report. That cross-examination, your Honour, is relevant it is submitted to issue 9B in the list of agreed issues. You will find that list, your Honour, in Court book volume 1.

40

HIS HONOUR: Page 12?

45

MR O'BRYAN: Yes, indeed. Now, as your Honour knows so far as the Commonwealth is concerned and indeed for the purposes of all parties the list raises a number of questions which are questions of construction and obviously we are not directing cross-examination to any of the witnesses in relation to those matters which are purely for your Honour and for legal argument

hereafter but they also raise very important questions of fact, your Honour, and from the Commonwealth's point of view the most important of the factual questions is raised by 9B.

5 There are a number of other factual questions of course which are more directly
the concern of others since our intervention is in respect of a limited range of
these issues. 9B as your Honour knows is directed to the factual question
whether the forestry operations in the so-called Wielangta forest area - and both
10 of those expressions are important, your Honour, because they are very broad
forestry operations covering basically everything which is proposed to occur in
the forest over the purview of this case, which for practical purposes appears to
be treated as the 10-year period in the plans, and the forest area as your Honour
knows is the very broadly defined forest area including the thing described as
15 the State forest, the thing described as the block and so forth. So within that
broad area, your Honour, the question arises whether the operations will be or
have been carried out in accordance with the RFA by reference to clause 68.
Clause 68 of the RFA, your Honour will find again in volume 1 at page 162. It
is an annexure or an exhibit to the affidavit of Senator Brown and it simply
states:

20

The State agrees to protect the priority species listed in attachment 2 -

and of course the three animals in question in this case are all there -

25

*through the CAR reserve system or by applying relevant management
prescriptions.*

Now, your Honour, if you look at Ms Underwood's statement a very large
portion of it, indeed arguably the whole of it, is directed to that question
30 because her statement - or her report, I should say, although its precise purpose
and methodology is nowhere described, and in that respect it is a rather unusual
expert report. We have no letter of instruction appended to it despite the rules
and the guidelines in respect of that and we have no real explanation in the body
of the report precisely what its purpose or role is.

35

But it is clear enough now it is submitted, your Honour, particularly following
our learned friend's cross-examination, that the purpose of it was to endeavour
to explain what are the management prescriptions that apply in respect of all of
the logging activities which are proposed in the forest over this period and to
40 apply them to the stag beetle which is the only one of the animals to which any
particular reference is given in this report.

And your Honour sees that most clearly within Ms Underwood's statement
when you look at the section that follows the general discursis about the
45 management regimes that apply in Tasmania generally and then more
particularly in this region commencing at about page 20 of the report which is
Court book 540, where your Honour sees the whole of the planning system laid
out or summarised in the way that Ms Underwood has summarised it, including
most importantly on page 540, your Honour, reference to the RFA itself, which

is directly relevant of course to the Commonwealth's interests in this case and really the reason for its intervention.

5 And then following immediately upon the RFA hierarchy if you will of issues
which your Honour sees further up that page, Ms Underwood describes the so-
called management decision classification system which is directly relevant to all
of the protective criteria and activities that occur within Forestry Tasmania in
respect of the species. Then great detail about the different classifications and
management regimes which are applied by Forestry Tasmania in respect of
10 production in all of its forests.

Turning then to the forest practices plans which as your Honour knows contain
the detailed prescriptions in respect of individual coupes and relevantly here for
15 17E and 19D, that is on page 544 of the Court book. And then descending into
as it were lower levels of detail down to the particular coupes in question here
and the animals and then finally descending into the greatest detail in respect of
the beetle itself. And your Honour sees that detail commencing with the table
14 on page 549 and then the balance of the report is devoted purely to the
application as Ms Underwood has applied those prescriptions, those plans,
20 etcetera, to the beetle itself.

Now, your Honour, that is a question of fact which is very much in issue
between the applicant and the respondents. It is a question of fact in respect of
25 which the Commonwealth does have leave to intervene and is vitally concerned
because it is at the heart of the clause 68 issue as it were or question that arises
in this proceeding and the cross-examination will be probably briefer than that
justification for it, your Honour.

30 HIS HONOUR: Yes. Thank you. Mr Tree?

MR TREE: Thank you, your Honour. I wonder if I might start by taking your
Honour to page 11 of the Court book and reminding your Honour of the
structure that the applicant and the respondent adopted in defining the issues in
dispute in this litigation. The first of the issues that was identified was the likely
35 extent of forestry operations in Wielangta and that is not a matter in respect of
which the Commonwealth has sought or been granted leave to intervene.
Number 2 whether forestry operations in the relevant coupes are actions is a
matter in which leave has been granted.

40 Number 3 the extent to which the beetle is present or likely to be present in the
Wielangta forest area not a matter in which intervention has been sought or
granted, 4, the extent to which the wedge-tailed eagle and 5, the extent to which
the swift parrot is present or likely to be present in the Wielangta forest area not
matters upon which the Commonwealth has sought to intervene. Number 6,
45 again a matter that the Commonwealth has not sought leave to intervene:

*What part of the Wielangta Forest will be, or is likely to be subject to
forestry operations by the respondent in the next approximately 15
years?*

Not sought leave to intervene. Not granted. 7:

5 *Whether the forestry operations referred to in paragraph 2 are likely, having regard to the endangered status of the three species, and all other threats to the three species, to have a significant impact on the three species.*

10 Not a matter in which the Commonwealth has sought leave to intervene, hence not granted. What my friend then tries to do, by reference solely to 9B, where it says:

15 *Where the forestry operations in the Wielangta forest area will be, or have been carried out in accordance with the RFA -*

is to subvert the very process that the parties had identified as defining issues, subvert it by saying that in effect so long as any witness talks about the RFA, or work that might be conducted in forests, that that is a matter which the Commonwealth has been granted leave to intervene in respect of. Now, that simply doesn't follow from the way in which the amended list of issues has been defined. If the Commonwealth wanted to have an opportunity to tackle each and every witness that comes through here in respect of factual matters, then it ought to have sought, and now ought seek, if that is its purpose, a much greater role as an intervener.

25 But, with respect, what 9B refers to is simply this, whether the factual issues that have been identified previously, whether those findings in fact represent the achieving of protection of a priority species under the RFA. That is the issue that the Commonwealth has sought, and been granted leave to intervene in. It hasn't sought, nor has it been granted, leave to trawl through all of the factual issues that are otherwise in dispute between the parties. So, with respect, it is quite mischievous to be saying that 9B somehow or other gets the Commonwealth into all of the issues that are otherwise in dispute. It should be confined to exactly what the parties had in mind, namely, the very narrow question as to whether or not in fact protection has been achieved by the logging operations under the RFA.

40 Now, that really, in my submission, is sufficient to deal with the present application, but my friend takes your Honour to Ms Underwood's affidavit, and in deference to the detail with which he did so, I wish to remind your Honour that nowhere in any of the material that my friend took you to does Ms Underwood express any view relevant to issue 9B. She does not transcend into any discussion about whether there is likely to be protection achieved in relation to the broad-toothed stag beetle, or any other species in question in this litigation, and hence it is simply incorrect to say that her affidavit impacts at all upon issue 9B, as it ought properly be construed.

True it is she mentions the RFA, but, with respect, that isn't enough to get the Commonwealth into 9B and it will lead to cross-examine. And in that regard I

remind your Honour of the terms of order 6, rule 17, which preclude the leading of evidence, or examining witnesses in the ordinary event without leave. So, in my respectful submission, the Commonwealth is simply seeking to subvert the terms of the grant of leave that it had been given into something much wider than it was ever intended, and if the Commonwealth wishes to do that, then it ought frankly own up to it, and say that it needs to expand the issues in respect of which it is granted leave to intervene. Those are my submissions.

5
10 HIS HONOUR: Mr O'Bryan?

MR O'BRYAN: Your Honour, if it be necessary to apply for a wider role, the Commonwealth does apply for that wider role, your Honour. The State of Tasmania has been given unlimited leave to cross-examine witnesses on all the issues in respect of which it appears in Court. Your Honour will recall originally, when application was made by the Commonwealth to become involved in the proceeding, the Commonwealth applied to be joined as a party. That was the Commonwealth's then desire. Your Honour was resistant to that. Senator Brown of course was resistant to the Commonwealth having any role whatsoever in the case, but the original notice of motion was an application to be joined as a party.

25 Now, I don't renew that application today, your Honour, but we do strongly submit that, having regard to the way in which this case has developed, and we have all learnt a lot about the case as the evidence has come in, and in particular in the course of the last few days as the cross-examination has occurred. It is essential, we submit, your Honour, that in the interests of justice that the Commonwealth has a limited right to cross-examine on issues which are directly relevant to 9B. It is simply not the case, if your Honour goes back to Ms Underwood's affidavit, to suggest that it has nothing to do with 9B can only result - I would never use the word mischievous to describe another counsel's submissions, your Honour - but it can only result from a misreading of her affidavit.

35 If your Honour looks at Corporal page 545 the reason why, as she has more or less conceded in the witness box, following the cross-examination by our learned friend, Mr Gunson, the reason why the last column appears in the schedule that appears there, table 14, in connection with the timber harvesting plans, your Honour will recall the last column is broad-toothed stag beetle management prescription, and your Honour sees a vast line of no's on page 549, it is - I am sorry, 549 of the Court book.

45 And a similar number of no's, and one yes on page 550, and really Ms Underwood more or less conceded that the reason why that column is in there is to suggest that the management prescriptions in Wielangta, in respect of logging activities in these coupes, have systematically denied any protection to the broad-toothed stag beetle over all of the period covered by that logging program. Now, that evidence will be criticised hereafter, your Honour, for reasons which will be obvious, arising out of the cross-examination. The

appropriate entry, if one was to be made at all, would have been not applicable, not no.

5 Similarly, if your Honour turns over a few pages in the statement you will see at the very end of it there is a kind of summary, a kind of survey of all of the management prescriptions arising out of the vast amount of material that was considered earlier in Ms Underwood's affidavit, and your Honour only needs to look at the very last of them on page 555 of the Court book, where again there is what is submitted to be a potentially significant, but also, it will be submitted, 10 a quite misleading summary of management prescriptions in respect of the beetle, arising out of this potted survey that Ms Underwood has undertaken. Now, your Honour, do you have the exhibit 4, the letter from FitzGerald and Brown?

15 HIS HONOUR: I do.

MR O'BRYAN: Yes. Your Honour, the questions which we will seek to ask go directly to the issue whether or not Ms Underwood has in fact prepared a report in accordance with the instructions given to her, apparently an expert 20 capacity for the purposes of this proceeding.

HIS HONOUR: How does that relate to 9B?

MR O'BRYAN: It relates to 9B, your Honour, because 9B is the 25 encapsulation of the arrangements that exist between the Commonwealth and the State of Tasmania in relation to the protection of threatened species through the RFA. That is what 9B is all about. Now, that is a mixed question of fact and law. We are not interested to explore the legal aspect of it. That is to say, what the meaning of the relevant provisions of the legislation and the RFA are, 30 but we are concerned, your Honour, at the factual level to know whether or not the management prescriptions do or do not afford the level of protection which is the apparent intention of clause 68.

Now, that is precisely what this statement goes to, and of course, your Honour, 35 it is a foundational statement, upon which other conclusions are drawn by other experts, and it is necessary to explore the expertise with which that has been assessed for that purpose, your Honour.

40 HIS HONOUR: But how does that link - how is the link made by reference to exhibit 4?

MR O'BRYAN: Oh, I am sorry. Because if your Honour takes the view that Ms Underwood's methodology is fatally flawed for any of a number of reasons, including the fact that there has been comprehensive breach of the Court's 45 expert witness guidelines, then your Honour will be inclined to discount the validity of that analysis, and set it aside.

HIS HONOUR: That will be so on the face of this letter and her report, and the Court can't be assisted by any cross-examination in that regard. It rather

reminds me of recent cross-examination I heard in the ACT Supreme Court of a witness in a personal injuries action, who was taken to every one of her tax returns for previous years, and asked to concede that what was written there was actually written there. And after two years, I went, hey, everybody out of the pool. I am not going to take four more years of this. What is the purpose of this cross-examination?

MR O'BRYAN: Your Honour, if we don't put to Ms Underwood that there is a fatal flaw at the heart of the instruction process, and the expertise which she purports to have in relation to the report pursuant to the request, then we will be criticised if hereafter we simply refer to exhibit 4, and say, these are the conclusions which your Honour should draw from that process, when Ms Underwood has not had the opportunity to defend herself in relation to those inferences that we will ask your Honour to draw. They ought, in justice, to be put to her, and really the rule in *Browne v Dunn* requires that they be put to her, your Honour.

HIS HONOUR: It is probably better that the respondent do that, but it didn't.

MR O'BRYAN: Well, your Honour, we are as close to the respondent as one could be in the matter, and we do desire to do it, and it will be brief, your Honour. Now, if the applicant will agree not to raise any *Browne v Dunn* point arising out of inferences, that we will ask your Honour to draw, arising from exhibit 4, and the complete disconformity here. I can see it on the page. If you look at the questions in exhibit 4 they have nothing to do with this report, nothing to do with it. This is plainly not the letter of instruction that gave rise to this report. One only has to look at the heading of the report, your Honour, and compare it with the questions and the process which Ms Underwood was invited to undertake by FitzGerald and Brown 18 months before this report was prepared, to conclude they have got nothing to do with each other.

HIS HONOUR: Is there anything else you want to say at the moment?

MR O'BRYAN: No, your Honour.

HIS HONOUR: Mr Tree, there has been an invitation of sorts there. Do you wish to take it up?

MR TREE: There has been. Can I just take a moment to remind your Honour of the role of the intervener which is expressed in subrule 3 of rule 17:

The role of the intervener is solely to assist the Court in its task.

HIS HONOUR: Yes, I understand that, I rather only call on you to see if you wanted to respond to any of the invitations inherent in what was put.

MR TREE: No, your Honour.

HIS HONOUR: To the extent that the only extent of the cross-examination would be to ask questions about this letter and to link this letter to the opinion.

MR O'BRYAN: Yes, your Honour.

5

HIS HONOUR: Yes, I don't permit the cross-examination.

MR O'BRYAN: If your Honour pleases.

10 HIS HONOUR: Would you like the witness excused?

MR TREE: Yes, please, your Honour.

HIS HONOUR: Yes, if she was here.

15

MR TREE: She has been asked to leave during the course of that debate - - -

HIS HONOUR: Could she come in?

20 MR TREE: - - - and I asked her to stay out of earshot, so we might need to go and find her.

<SOPHIE CLEMENTINE SORELL UNDERWOOD, RECALLED

25

[11.37am]

MR TREE: I wonder if the witness might be excused, your Honour.

HIS HONOUR: Yes.

30

Ms Underwood, thank you for your evidence, you may be excused from further attendance but may remain in Court if you wish.

35 **<THE WITNESS WITHDREW**

[11.37am]

40 MR TREE: Thank you, your Honour. Ms Mortimer will deal with the next witness, but I am not sure whether your Honour was proposing to take a mid-morning break at this stage?

HIS HONOUR: I wasn't unless the parties particularly wanted one.

45 MS MORTIMER: If your Honour pleases I call Peter Brown.

HIS HONOUR: Thank you. Just a moment. If there is an oath or affirmation being taken, not only should there be complete silence, but no movement, it signifies the solemnity of the oath and the affirmation, and the importance of the giving of evidence to the Court. Start again, please.

<EXAMINATION-IN-CHIEF BY MS MORTIMER

5

HIS HONOUR: Thank you. Yes, Ms Mortimer?

10 MS MORTIMER: If your Honour pleases.

Got your glasses there, Mr Brown?---I have indeed, yes.

15 Can you tell his Honour please your full name and your address and your occupation?---My full name is Peter Broadbent Brown and my address is number 4 Glen Street, South Hobart and I'm a retired zoologist and ornithologist.

20 Now, you have affirmed an affidavit in these proceedings, Mr Brown. Your Honour, it is at Court book 453.

Do you have a copy of that in the witness box?---I do, yes.

HIS HONOUR: Book 2?

25 MS MORTIMER: I am sorry, your Honour, yes Book 2, Court book 453.

Now, Mr Brown, are there any corrections that you want to make either to your affidavit or to the report that is annexed to your affidavit?---There are two small corrections I wish to make.

30 Can you tell his Honour where they are, please?---On page 13, number 7.

This is page 13 of your report?---On my report.

35 Your Honour, that is 475.

Is it of your report, Mr Brown, or something else?---Yes, it's on my report, number 7 - point number 7.

40 Paragraph 7?---Yes.

45 Your Honour, that is page 465 of the Court book?---And it's a very small matter on the fifth line, "Brereton 1997 stated that in south east Tasmania all recorded nest sites recorded were within eight kilometres of the coast," I want to delete the first recorded, "all nest sites recorded were within eight kilometres of the coast."

Thank you, Mr Brown. And there is another correct?---And there was another correction, that was in my CV and that's on page 16 of my report, and it was on number 6.

5 Now, that is Court book 478, your Honour. What is the correction there, Mr Brown?---The sentence ends abruptly and something is missing midway down, I think the 1, 2, 3, 4, 5 - on the fifth line the sentence starts, "At Howard Gardens I established an extensive breeding program using."

10 HIS HONOUR: Sorry, I am not with you - oh yes, I see. Yes?---"using." Well, there was a piece obviously missing there and I wanted to insert, "a separate breeding facility from which the public were excluded."

15 MS MORTIMER: Okay. Just pause a minute while we all write that down, "a separate breeding facility from which"?---"from which the public were excluded."

20 All right, Mr Brown, subject to those - are those the only two corrections you wanted to make?---Yes, they are.

Your Honour, incorporating those two corrections I ask that you treat that affidavit as read on behalf of the applicant in these proceedings.

25 HIS HONOUR: Yes, I will treat the affidavit as constituting part of the evidence-in-chief of the witness.

30 MS MORTIMER: Now, Mr Brown, on page - I will have to get the numbers right - I withdraw that. Can the witness be shown a copy of his affidavit in the Court book, please?

Do you have a copy there of your Court book version?---Is that it?

That is it, yes?---Right.

35 Can I ask you to turn to page 482?---Yes.

40 And you will see there is a roman numeral (v) up the top, there is a reference to a report you did in 1989 and then there is a reference, if you look at page 483 under paragraph 18(f) to a report that you have entitled The Swift Parrot in 1989, are they the same reports?---Yes, they are.

And that is the principal piece of research that you have undertaken in relation to the swift parrot; is that right?---Yes, it is.

45 So when, for example, if you look at page 464 of the Court book, if you look at your answer to question number 5 you start with the words, "In my survey in 1988," is that the same survey that you are referring to?---Yes, it is.

Your Honour, by an oversight on my part that survey has not made its way into the evidence and I want to tender it.

5 HIS HONOUR: Is the '88 survey the same as the '89 report?

MS MORTIMER: It is, your Honour, it is one and the same document. And it is a document that has been on the respondent's list of discovered documents, so it ought not to come as any surprise, but it is my fault, I hadn't picked it up until this morning. So I will hand a copy to the witness.

10 Can you look at that document, please, Mr Brown. Is that the survey to which you refer in your affidavit and in your report?---Yes, it is.

Your Honour, I tender that.

15 HIS HONOUR: Exhibit E.

20 **EXHIBIT #E 1988 SURVEY BY PETER BROWN**

MS MORTIMER: Pardon me, your Honour.

25 Can the witness be shown, your Honour - I think it is exhibit C and that is the map we tendered yesterday through Mr Dell that he gave evidence about preparing for Mr Brown. That is it that your Honour's associate just handed. That is it. Just for the transcript purposes exhibit C - D.

30 So you have seen that map before, Mr Brown?---I have, yes.

Right. I want you just to assume that the dots that are shown on that map show discovered swift parrot's nests. In your opinion is the distribution of the discovered nests on that map consistent or inconsistent with your understanding of the breeding habitat of swift parrots?---I would say that by and large it is very consistent.

40 Thank you. You can hand that back to his Honour's associate. Now, if your Honour pleases I have a couple of questions in response to the respondent's affidavits and a couple of questions arising out of the view that I want to ask Mr Brown about.

Mr Brown, you attended on the view that the Court undertook on Tuesday, the 6th of December?---Yes.

45 And is it the case that otherwise you had not been up to that area of Wielangta for some time?---I hadn't been at all into those areas where the coupes were. I've been in areas closer to the coast, but not into those coupe areas.

Now, you recall that the group, the Court group, took lunch up in a part of the unlogged coupe of WT019D?---Yes, I do.

5 And did you have an opportunity to look around and examine the habitat that was existing in that coupe?---Yes, I did.

10 And what is your opinion about the suitability of that habitat for swift parrot nesting?---Well, in the area that we examined where we had lunch there was a hillside to the right, looking down the hill and that was probably some of the finest swift parrot breeding habitat that I had seen, in that it was an extremely mature forest, it was fairly contorted in the crowns in that we didn't have any straight stems, there were no directly straight stems, they tended to diverge and they were fairly well spaced. I think this is an important issue is when the timber is very close together it creates unsuitable habitat, everything is
15 struggling to reach a crown and you end up with a load of straight stems. This is old forest, very mature forest which is I suspect has been very little interfered with over the years at all since human habitation or white person had been there. As a result of that there are many broken branches and dead branches where it was probable that there were nest sites. I say probable because it's impossible
20 from a single sighting to determine whether a hollow which looks suitable at the entrance has any depth to it or whether it has the right confirmation. But certainly there is a lot of forest there which looked very suitable for the birds.

25 Now, Mr Brown, do you recall that after taking lunch in that coupe we walked down the road into coupe WT017E, the one that has been logged and do you recall that we paused for some time in a landing area?---Yes, I do.

30 And based on what you saw from that area can you tell his Honour what your opinion is about the suitability of the habitat that is retained in that coupe for swift parrot nesting?---In the immediate future the suitability of that coupe which had been logged and partially logged, I am assuming you are referring to the one which was partially logged?

35 Yes?---Would in my view be totally unsuitable for swift parrots. There were quite a number of trees left and I accept that, but they were - by and large they were extremely trees, very narrow and from what we saw later on in the day and the explanations we had later, at one particular point we were advised that a number of trees which had been left from previous harvesting were approximately 50 years old and at that stage they were totally unsuitable, they
40 just hadn't had - they hadn't got the maturity to develop nesting sites. And based on that, and from what I saw at that actual viewing, my submission is that that area wouldn't be suitable for nesting swift parrots probably within a hundred years or more.

45 Right. Now, I want to take you, Mr Brown, to Mr Shields' affidavit which has been filed on behalf of the respondent. Have you had an opportunity to read that?---I did, yes.

Your Honour, it is at Court book 5, page 2492.

Mr Brown, I want to take you to something that Mr Shields says at page 2509?---Yes.

5 You might need to look back at the start of that paragraph which is at 2508 where Mr Shields is talking about what he understands to be the threatening processes listed in the Swift Parrot Recovery Plan and the first - and he goes on to say what his own ranking based on his experiences. The first two that he identifies are permanent loss of nesting habitat for any reason and permanent
10 loss of foraging habitat. Now, his focus is on permanent loss, do you have an opinion whether that is an appropriate focus or not?---I don't have any issue with the word permanent as such, but I am concerned that we are dealing - if I could - may I explain a little bit?

15 Please?---We are dealing with a species which is classified as endangered and it's classified both at the State level and the Commonwealth level and in other States in which it occurs. So there is an overall responsibility within Tasmania and for the rest of Australia to conserve that species and the rate of change which is occurring within Australia in general is so rapid now that I believe that
20 we can't count on when we say permanent loss, I agree that permanent loss is very negative, but even temporary loss in the case of those areas which are being logged now, would in my view be unsuitable for the swift parrot for a hundred years. And I don't believe that when we are dealing with an endangered species that we have a hundred years to wait for that area to be
25 occupied. Hopefully if we have done lots of other things then the area would be reoccupied again. But if things continue the way they are with the swift parrots it is going to get more and more endangered and there won't be areas like the areas that we saw were logged for them to reoccupy again before they are right on the verge or become extinct. So that's my concern in relation to that
30 particular point.

Now, can I ask you to look at what Mr Shields says on page 2510 in subparagraph (e) of paragraph 38, that is the one that starts, "Unnatural adult mortality"?---Yes.

35 Now, he says two things there that I want to direct your attention to. The first is that he says, "I rank this risk of unnatural adult mortality very low; the perception is worse than the effect." Now, I want to ask you two questions about that. The first is why, in your opinion, is adult mortality important in
40 terms of protection and recovery in terms of a species that is listed as endangered like the parrot?---Why is adult - - -

Adult mortality as opposed for example to juvenile mortality?---Because they are the current breeding stocks.

45 All right. And Mr Shields' opinion is that he ranks this risk as very low and he says that the perception is worse than the effect; what is your response to that?---I don't know what he bases that on. I certainly don't agree with his opinion on that. In my own opinion - and this is the basis of my argument in the

case of the conservation of the Wielangta area for the swift parrots - is that the whole of the Wielangta area, and I am referring from the area between Marion Bay in the south up to Orford in the north, is I considered during my survey of the swift parrot to be the best and most suitable intact area of breeding habitat
5 for the swift parrot during the breeding season. It does occupy other areas, it certainly goes to the north and it certainly goes to the south, and at times it's very common around Hobart. The bird itself is something of an enigma because
- - -

10 Mr Brown, I will stop you there, I will just ask you to focus on back on my question for a moment?---I beg your pardon.

And I want you to tell his Honour why you don't agree with Mr Shields' opinion that the unnatural mortality issues are not really a very high ranked risk?---I
15 have experience of a number of instances of mortality. When the bird first arrived in Tasmania they tend to congregate around urban areas and very often they were - not tropical trees - but introduced trees which are flowering which the birds find attractive, including blue gums as well. They will feed and use urban areas quite regularly for feeding and I have a number of instances where
20 I've - and I can record those instances if you would like?

I understand, Mr Brown, correct me if I am wrong, some of them are reported in your survey; is that right?---Yes, they are. There is an additional one and I would like to add that one if I may which I didn't put in my report. And that is
25 some birds which are feeding down in Hobart on the coast, the blue gum preferred habitat is a coastal species and they were feeding on the coast but they were breeding in the hills to the hinterland, in the foothills of Mt Wellington. While they were flying from the feeding to the breeding areas and vice versa, they are a very fast rapid flying bird, extremely rapid flying bird and they fly
30 very directly and they were flying over the brow of a hill and in going over this brow of the hill they cut the brow as low as they possibly could. In that area there was a school, a primary school and they had a tennis court and a games court which had chain-link fencing. And during that year and in subsequent years until we have made an effort to ensure that the birds can see this thing, the
35 birds have actually flown straight into that chain-link fencing. Many have been killed, some have even had their wings ripped off as they fly at this enormous speed. So that has caused mortality in that particular case and I quote a number of other cases one of which in particular I would like to mention. And that is I was watching them feeding in a tree by the roadside and a large articulated lorry came by and they all flew out of the tree, they tend to dive down and then fly up
40 again after they leave the feeding tree and they flew straight into the side of that lorry. And I think it was eight or seven or eight of those birds got killed by that incident. Those are just some incidents that I've recorded and I've been told about. I'm sure because we very seldom get - mortality in birds is enormous all
45 over the place, but we don't have many of them brought in. In other words birds die and then they're eaten overnight by predators and I suspect the same happens with swift parrots. So what we are seeing is I believe just the tip of the iceberg and that mortality is an issue. This is the reason why I consider that the Wielangta area, being secure and having less human interference and less houses

and less human involvement in that area, is an important sink if you like for the breeding birds and I consider it important to give maximum protection to that area.

5 Thank you. Now, the second thing that Mr Shields says in that paragraph is that he identifies two factors that he calls major ameliorating factors for the swift parrot. The first is its relatively high reproduction rate, and the second factor he identifies is its longevity. Now, can you just briefly explain to his Honour what kind of surveys in your opinion are necessary to be able to
10 establish whether a species is long lived or not? What kind of research to you need to have done?---In a study area where you've got known individual birds, and they're likely to remain or return to that particular area, it's by banding or marking in one way or another a permanent mark, so that you can have banding and then capture, re-capture to determine - over a number of years to determine
15 ages.

Now, as far as you are aware, in relation to the swift parrot do you know of any research that is being carried out at all about longevity?---No, I don't. I've tried to determine if there are any studies that have been undertaken and I'm unable
20 to locate them, and I certainly don't know of any.

Do you have an opinion yourself about whether the species is long lived or not?---My own opinion is that it would - because it's a native feeding bird, which has an extremely high metabolic rate, that it would not be as long lived as
25 many of the other parrot species. I could suggest probably seven or eight years at the most. But that would be guesswork, because I really don't know. The only thing I can suggest in Mr Shields' defence, if you like, is that he may have got this evidence of longevity from birds which have been kept in captivity. But I would argue that maintaining them in captivity is very different to the birds in
30 the wild, and the problems which they have to face in the wild.

All right. Now, can I ask you to look at paragraph of Mr Shields' affidavit, which appears at page 2514?

35 HIS HONOUR: Is it Mr Shields or Dr Shields?---Dr Shields.

MS MORTIMER: Oh, I am sorry, your Honour, Dr Shields. And, now, in that paragraph Dr Shields is referring to your affidavits and Mr Kennedy and Mr Dickman's, and he makes some assertions about that. Now, he then expresses
40 this opinion, about the fifth line down:

At most, if the logging operations happen to strike an undetected nesting cluster up to 10 pairs might be directly impacted.

45 And he then goes on to use that number of 10 pairs to express some further opinions. Do you know of any basis in any of the surveys or research that you have seen about the swift parrot how that figure of 10 pairs might have been arrived at? Have you seen any evidence that would back up that number?---No. No, I haven't.

Do you have an opinion yourself about whether logging operations were to strike in an undetected nesting cluster, as Dr Shields calls it, whether there is any reasonable basis to be able to estimate how many birds might be affected, breeding pairs?---No. All I would say in relation to that is that they do cluster. There is strong evidence, both from my own studies, and from other people's studies, that these birds do tend to breed as groups, and I think it's - I mean, there could even be 10 pairs within one coupe, rather than 10 pairs within a number of coupes. But that would be very much guess work, but I do - I do - one thing I would like to say, if I may, in relation - - -

Well, if it is necessary to answer that question, Mr Brown, you should. If it is not, you don't?---No, it probably isn't, no.

Okay. Now, can I ask you to turn over the page to 2515, and paragraph 51, where Dr Shields is expressing some opinions again about the impact of logging all the coupes in the Wielangta State Forest, and he admits, in the second sentence, that the removal of large trees will undoubtedly remove potential habitat that may otherwise have been used for nesting in some years. He then makes an assumption about retention prescriptions and habitat clumps, and that they might include large trees with hollows, and he reaches this conclusion:

The proportional loss of nesting habitat will not equate to the area of coupes harvested.

In your opinion, is there any basis for Dr Shields to express that opinion, and as far as the surveys and research that you are aware of?---May I just read the - sorry, I wasn't able to find it until you'd almost finished. May I just read it through?

Sure. Read it to yourself, please?---I'm actually not very clear what he's getting at when he says the proportional loss of nesting habitat will not equate to the area of coupes harvested. That doesn't really - I'm not absolutely clear what he means by that.

All right. Well, do you agree that that is the likely result, or is your opinion that - no, I withdraw that. The question I asked you, Mr Brown, was whether you are aware of any research or surveys that would enable Dr Shields to reach that conclusion, about swift parrots. That is, that just because you harvest, as I understand he is saying, the area of coupes that you harvest doesn't equate to the loss of nesting habitat. Are you aware of any surveys or research - - -?---No, I'm not.

- - - on swift parrots about that?---No. No, I'm not, and I'm still not clear what he's getting at. Perhaps it's my ignorance, but I - - -

All right. Thank you, Mr Brown. Now, pardon me a moment, your Honour. Can you look at page 2516, paragraph 54, and in that paragraph Dr Shields makes a comment about your paragraph 25. So I want you to look back at that.

That is page 475 of the Court book. It is in a different volume. That is right, Mr Brown, it is in that volume?---Yes.

5 And your paragraph 25, you are answering a question about what steps ought the State to take to protect swift parrot populations, and you identify four things there, and Dr Shields comments that it is interesting that you make no mention of forestry. Is there a reason that you didn't mention forestry in that paragraph?---Well, there is, because I've already talked about what I consider should occur, and that's by way of the moratorium I was suggesting. Until we 10 have a better handle, a better understanding of the use of that area by the swift parrots. So that - clearly that included - and I didn't feel it was necessary to add that.

15 Now, can you go to page 2517, Dr Shields' affidavit, paragraph 59?---Yes.

And again there is a comment by Dr Shields about your report, and Mr Kennedy's report, and he makes this statement:

20 *At one stage Brown appears to equate forest harvesting to loss of forest, that is, land clearing, not forestry.*

And he goes on to quote some parts from your report. My question is, what is your response to what Dr Shields says there, in terms of the effect of harvesting and regeneration on available breeding habitat?---Following harvesting my 25 assessment is that nesting habitat is not available within those areas for 100 and possibly more years, so whilst perhaps Dr Shields is right in saying that I refer to it as loss of forest, and he is right in saying that it is only temporary loss. But I still argue the case that it's in the fact that it's a loss of potential nesting habitat for such a long time, and possibly actual nesting habitat. We don't know that it's 30 not actual nesting habitat. And it's such a long period of time that I believe we don't have that amount of time to wait.

Now, can you look at page 2518, Dr Shields' paragraph 61, and there Dr Shields is commenting on your statement that you have not found a nest in 35 forest which has been harvested in the past 10 years and he has an argument about that and he makes the statement that you don't indicate how often you looked in comparison to other sites, nor in which part of a harvested area you may have looked?---Yes.

40 Referring back to your experience, particularly your experience with the swift parrot survey, what was the basis for your statement that you haven't found a nest in forest that had been harvested in the past 10 years?---When I undertook my survey - and you must realise that that was the initial survey, this species had never been looked at before so we were starting from scratch and I was 45 opportunistically looking for swift parrots and looking at their habitat at the same time and I must admit I do agree that I wasn't systematically looking for them other than the fact that I was covering suitable habitat along the coast right the way from the south coast to the north coast on the east of Tasmania and elsewhere but I certainly wasn't systematically looking in Wielangta or any

other area in particular but I was trying to locate them wherever I could and I have actually walked most of the coastal area, as I mentioned, between Orford and Marion Bay.

5 Based on what you know about the swift parrot and its breeding preferences how likely is it, in your opinion, that clusters of swift parrots are going to breed in forest that has been harvested in the past 10 years?---Very unlikely.

Now, can I ask you to turn to page 2522, paragraph 70, of Dr Shields' affidavit.
10 That is a part of his affidavit where he is giving some evidence about habitat clumps and strips within the coupes and he criticises you about half-way through that paragraph in this way. He says:

15 *It is not valid to treat wildlife habitat clumps as Brown does as small copses in which potential nesting trees are unlikely to be used by swift parrots after harvesting due to their exposure.*

And he criticises your characterisation. He says:

20 *The statements are given without context.*

Now, my question to you is why do you draw a distinction between small
copses like wildlife habitat clumps and larger forest areas when you are talking
about swift parrot breeding habitat?---I use the word "copses" as probably an
25 old anglo-saxon one which I was brought up with my UK background but in
many ways I consider that they are similar. Copses and habitat clumps are a
group of trees which have been retained within a harvested area. Whilst I was
asked particularly about wildlife habitat clumps I do concede that by and large
habitat clumps weren't specifically left and made available for swift parrots but
30 in relation to swift parrots themselves I consider, and we saw a number of them
on our field trip the other day, that they have little or no value because they are
exposed and in my experiences in looking at swift parrot nests I can't recall any
nests I found in open exposed areas.

35 Yes?---They are a very desirable pray for some of the larger birds of prey like
goss hawks and peregrine falcons and the like and if they nest in those isolated
open areas they are subject to predation. They are certainly more exposed to
predation in those sort of areas than they would be if they were in more
continuous forest and for that reason I believe that swift parrots choose more
40 continuous and not isolated positions to nest.

Can I ask you just to explain to his Honour, Mr Brown, why you say that the
swift parrots, if they are nesting in an exposed location, are more exposed to
predation from birds such as goss hawks. Just explain, based on your
45 experience, how those predators operate?---Predators operate in - the two types
of predators I mentioned operate in different ways. Peregrine falcons will
swoop from a great height and at an enormous speed - I think they have been
recorded as the fastest flying bird of all, something in the region of 200
kilometres an hour - and they will grab the bird in mid-air. If a swift parrot is

coming from an exposed area to its feeding area or from its feeding area to an exposed area then it will be much easier pray than it would be normally if they were flying through the forest and in my experience in seeing swift parrot nests they approach the nests through the forest. They actually fly through - rather than over the canopy they fly through the lower levels to their actual nest site.

Yes?---In the case of goss hawks they are pouncing predators and they would adopt a situation - they could sit on the edge of an area where clearing hasn't taken place and wait for the swift parrot to come in and then pounce on it or actually be within that clump itself and dive on the bird and grab them. It just means that the area where the birds are potentially nesting within a habitat clump are much more exposed and the birds would feel less secure. That is the reason I believe why they don't nest in those type of areas.

Thank you. Now, can you go to page 2523, paragraph 73 of Dr Shields' affidavit?---Sorry, what number was that?

Paragraph 73 and page 2523?---Yes.

And again that is a comment by Dr Shields' about your report and what he says in the second sentence there is:

For instance in response 20(d) Brown reinforces the view that regardless of what prescriptions are applied, harvested forest will not provide nesting habitat for swift parrot.

Now, in the context of what you were - the evidence you have just given to his Honour about your opinion about temporary loss and permanent loss, what do you say about Dr Shields' comment there?---I say that harvested areas will not provide habitat for swift parrots, and I would tender that by saying what I had said before, within 100 years.

Now, if you go to page 2524, paragraph 74, and what Dr Shields' says there is that - he is talking about your affidavit again and he quotes from response 19(h) and he characterises what you are doing there as condoning the existing adaptive management process within Forestry. Now, is that your opinion? Do you condone the present adaptive management process within Forestry?---In many ways I do, by and large, I do. I have been involved in this whole process in relation to threatened species and the prescriptions which have generally been in place I believe are fairly reasonable. In relation to all species as our knowledge increases and as our understanding increases so prescriptions would and should change and that is what has happened up until now so I don't take issue with Forestry there. I think they have done their best in that.

Yes?---If I could go on: what I am saying is that we don't know enough about the swift parrot within the Wielangta area. The evidence I have seen from that map which I was shown, shows that the Wielangta is an important breeding area for the swift parrot and I think we need to do much more work in that area before we can finally say what are the best areas and what aren't the best areas.

I have no gripe with Forestry as such and, as I said before, I think in many ways they have done their best and they have done their best with advice which I have been partly providing but on the understanding I have now in relation to the swift parrot breeding and Wielangta, more work needs to be done.

5

Now, just follow that up and finally, Mr Brown, assume that the respondent's evidence suggests in total really this theme, that the appropriate approach in relation to the swift parrot is to continue logging in Wielangta with management prescriptions and afterwards find out what the impact has been. What is your opinion about whether that is the appropriate approach in Wielangta in relation to this species?---My answer to that would be that it would be inappropriate. If you go ahead and continue logging, continue doing what you're doing you're probably destroying some really excellent habitat and it is not going to tell you anything about what you have destroyed in relation to the swift parrots there. But I do say that in relation to further work a lot of areas have been logged already and on the basis of those areas which have been logged we can do some research - further research, work on the use of the areas and the proximity to harvested areas and those sort of things without actually taking out one more stick at the present time and I think that's something that needs to be done, is that we know that it's an important area, we need to determine which are the key areas, which are the important areas, and I must mention the fact that because they're areas which are used or not used in one year, it doesn't mean to say they're going to be used or not used in another year. My understanding is that the swift parrot is - whilst it opportunistically uses different areas in different years dependent on the flowering of the blue gums, it is to some extent a creature of habit and therefore it will come back to the same sites which it's used in previous years. I have evidence of this from a number of areas. Where swift parrots have been observed in one year, they have missed the area for a couple of years and they have come back again and nested in the same areas in future years. So I think if a survey is undertaken over a number of years within the Wielangta area you'll get a very good handle on what areas are important for the parrot and what areas aren't important. And on the basis of that, logging strategies can be put in place. But I have a strong feeling that at the current time that we don't have sufficient information to be able to say with some certainty that we're not destroying swift parrot habitat.

35

I have no further questions for Mr Brown, if your Honour pleases.

40

HIS HONOUR: Mr Gunson?

MR D. GUNSON: Thank you, your Honour.

45

<CROSS-EXAMINATION BY MR D. GUNSON

[12.23pm]

MR D. GUNSON: Mr Brown, could I raise with you first of all one issue, do you have formal qualifications as a zoologist by - - ?---I don't, no.

Thank you. You are basically self-taught I think having read through your CV?---And many, many years of experience.

5 Of course. Yes, I accept that. That is the basis of your background, is it not?---It is.

All right. Now, you mentioned a little while ago in your evidence-in-chief what you called the Wielangta forest and - well, Wielangta area I think was the expression you used. Can you just tell me again, please, the parameters of the
10 Wielangta area as you understand it to be, that is, what you are referring to?---What I'm referring to in Wielangta - the Wielangta forest has been identified on the maps that I was looking at, is part of it. The Wielangta area I refer to in my affidavit means the whole of that area north of Marion Bay and south of Orford. So it includes a much larger area than the Wielangta forest.

15 And how far inland from Orford is included in that definition?---In that definition I would include up to 10 kilometres.

20 So we can take 10 kilometres inland from Orford and presumably 10 kilometres inland from Marion Bay as well?---Yes.

Now, is your Honour familiar where Marion Bay is?

25 HIS HONOUR: I think it was pointed out on the view from - - -

MR D. GUNSON: Yes, if you came out south and headed back towards the main highway Marion Bay is just before you start to turn - sorry, just after you start to turn back towards the highway.

30 MS MORTIMER: Perhaps my learned friend could have someone run over and point it out on the map.

35 MR D. GUNSON: I don't think it is on it, is it? So we can't do it?---It's nearly on it, but not quite.

I think, your Honour, this is the benefit of spending much time surfing for this particular person.

40 MR DIXON: That is that northern tip of Marion Bay that runs down to the sand spit in the south which would be about there.

HIS HONOUR: Yes. Thank you.

45 MR D. GUNSON: I think we all know where Marion Bay is now. Thank you, Mr Dixon.

Now, and again I think you said 10 kilometres inland from Marion Bay; correct?---Yes.

Now, we are talking about a pretty vast area when we talk about the Wielangta area per se, aren't we?---We are.

5 And at the northern end we have Orford with the population that lives there and the beach communities south of Orford?---Yes.

And we have the beach community that lives within the vicinity of Marion Bay?---Yes.

10 And we have farms and small hamlets and so forth inland, particularly in land of Marion Bay?---Yes.

15 Now, do you extend the Wielangta area that you describe, say, as far north as Triabunna, just up from Orford, or not?---No, I don't.

The swift parrot in general terms is reasonably well spread in Tasmania, isn't it?---At certain times, I mean, it is very much dependent on the flowering of the blue gum but in broad terms it can have a distribution from Southport Lagoon, as I have said in my report, up to and beyond St Helens.

20 All right. Now, we certainly don't have Southport Lagoon on that map and I defy anybody to tell me that, but Southport Lagoon is at Southport which is in the very south of the State. It would be about as far south as you can go; correct?---Yes.

25 And St Helens in the north which is up - quite a fair distance into the North East; correct?---Mm.

30 So it is over a fairly widespread area down the East Coast, isn't it?---It is.

And leaving apart the far North East tip of Tasmania - areas up there, it basically covers the whole of the East Coast of Tasmania?---Yes.

35 Maria Island?---Yes.

Bruny Island?---Yes.

40 Do we find it down in the southern islands around the Maatsuyker group?---No.

Not in there?---No.

Do we find it in the South West National Park at all?---No.

45 Because there is no blue gum there?---I beg your pardon, I would correct that, I have actually seen them in the South West National Park, there's a very small population of blue gums in a place called Bombay, which it may not reach, Bathurst Harbour, and they have been seen down there but it's a very, very rare occurrence.

In any event you have established that they are as far west as Bathurst Harbour in the South West?---They have occurred there and I suspect they're largely off route because as you may recall in my evidence I have said that blue gum is an important issue as far as they're concerned. Most of the records to the west are post breeding and the bird is heavily reliant on two species of gum during the breeding season. Post breeding is when they tend to move into other areas and feed on other tree species.

But in any event I think at Bombay and Bathurst Harbour you said there were blue gums there. It would be reasonable to assume that they were (a) feeding and (b) breeding in that area if blue gum - - -?---No, it's not reasonable to assume they were breeding.

Why not?---It's not even reasonable, because it's a very, very small population. I would contend, I would suggest that it's hardly sufficient to maintain a breeding population there.

But nonetheless the birds are present?---The birds were present, yes.

They are found in the North West of the State, aren't they?---Yes.

How far into the North West have they been recorded?---They have been recorded to Smithton and possibly on the North West Coast.

Well, Smithton is on the North West Coast, isn't it?---When I said the North West Coast I actually meant the West Coast of the North, if you know what I mean?

They have been recorded at Smithton which is a fair distance along the North West Coast?---Yes.

Have they been recorded beyond Smithton?---I don't recall, but it is possible.

All right. And have they been recorded on the West Coast?---On the West Coast itself?

Yes?---Yes.

Right. Whereabouts on the West Coast?---They have been recorded at Macquarie Harbour and - pardon?

Near Strahan. Just for his Honour's sake, near Strahan?---Near Strahan.

Yes?---They have been recorded at Waratah, which is the northern part of the West Coast.

Yes?---And potentially a number of other areas as well.

Perhaps you could tell me the other areas, please. I just want to get a good idea of the distribution of the bird?---I can't off the top of my head recall those other areas. I know - sorry, Lake St Claire is one area they have been recorded.

5 We will come to that in a moment. I just want to confine myself or confine you, please, to the West Coast for the moment, we will come to the central district shortly?---The West Coast, we're still talking about the West Coast.

10 You said Macquarie Harbour and Waratah?---Yes, and also at Temma - near Temma.

Temma. Yes, on the coast there?---Sorry, I beg your pardon, not Temma, Tullah.

15 Tullah. Inland, quite a significant distance?---Mm.

That is a long way inland at Tullah?---Yes.

20 You mentioned Temma, were they found at Temma?---No. No, that was a mistake, I meant Tullah.

Well, Tullah, is what 40 kilometres inland?---Yes, at least 40 kilometres inland.

25 And Waratah would be a similar distance inland?---Yes.

All right. Where else in the west coast?---I can't recall anywhere else.

30 You wouldn't disagree with the proposition that they are regular visitors to the west coast during the breeding season?---No, I disagree with that. Most of the records - when I say most, I think all the records I have of swift parrots on the west coast are not during the breeding season, they are post breeding. If I could explain - - -

35 I will come back in a moment and I am sure you will be re-examined on that.

MS MORTIMER: The witness ought to be able to explain, your Honour, he is an expert.

40 HIS HONOUR: Well, I don't know that it was directly responsive to the question, Ms Mortimer.

MS MORTIMER: If your Honour pleases.

45 MR D. GUNSON: Do you deny the proposition that nesting - sorry, breeding colonies of the birds have been found on the west coast?---I don't deny it because I'm not aware of it, but there is a possibility that there has been breeding in the Smithton area. Elsewhere in the west coast I would doubt it, but not having the facts I'm unable to deny it.

You would accept that there have been breeding colonies as far west as Smithton?---They have occurred as far west as Smithton in the breeding season, yes.

5 And they have bred right along the north west coast?---They have been recorded breeding at a number of areas along the north west coast.

Perhaps you would identify those for me, please?---Devonport.

10 Which of course is a city?---Yes, in the environs of Devonport. When I say Devonport I'm stating that is a town where they occur, I'm not saying they are breeding there.

15 All right, whereabouts - - -?---Because they don't breed in cities. I think I can say that categorically that they don't breed in cities.

20 Whereabouts along the north west coast have they been recorded as breeding apart from Smithton?---Penguin. Breeding, I'm not aware of where they might have been recorded. I know at Penguin they have been recorded there and I think during the breeding season, yes.

In the hills beyond Penguin I assume rather than the town?---No, that's right and feeding in blue gum trees which have been planted many, many years ago.

25 And where else along the north west coast?---I really can't recall. I really can't recall.

The hills beyond Ulverstone?---Pardon?

30 Beyond Ulverstone in the hills there?---Certainly in the Gog Range, they've been recorded.

35 Whereabouts is the Gog Range?---The Gog Range is at the back of sort of the Devonport-ish area.

Extending from where to where?---Extending southwards 20/30 kilometres inland.

40 So where would be the most southerly point of the Gog Range? Does the Gog Range run north-south or east-west?---The Gog Range is basically north-south.

So where would be the most southerly portion of the Gog Range?---Well, I don't know, I can't name it. I can't name it.

45 It is a reasonably extensive range of hills?---It is.

And they have been recorded as breeding there?---Yes.

And that is basically behind Devonport is it?---Yes.

How far away from Devonport?---I would be guessing. If I said probably 20 kilometres - it could be up to 20 kilometres.

5 Now, if we look at in the present time in Tasmania, have you any information as to their present whereabouts; first of all, have they arrived?---Yes, they have arrived.

10 Yet they weren't at Wielangta the other day were they?---I didn't see any at Wielangta.

No, and you didn't see any flowering blue gums either, I suggest?---No, but I wasn't expecting to see any flowering blue gums.

15 Is there a reason for that?---Because there isn't much flowering blue gum in the Wielangta Forest that we looked at, very small amounts. There are blue gums there, we certainly saw blue gums, there's no question about that and we actually drove through some - a very substantial blue gum forest as well.

20 But there were none flowering, or a very small amount flowering?---No.

25 So we can go back to the basic proposition I suppose that the birds are opportunistic. If there was no flowering blue gum they won't go there?---I agree with that.

And if they arrive from the mainland looking for flowering blue gum in Wielangta and it is not there, they are going to fly on to somewhere else aren't they?---That's probably right, yes.

30 A fair assumption?---Yes. I would add to that that they may not, when they first arrive which is in early August, there isn't much blue gum flowering anywhere and they feed on other resources which is eucalyptus ovata. And they feed on those and they would feed up on those, and then they may move out to where blue gums are flowering by nesting time. So what I'm really saying is
35 when they first arrive it doesn't mean to say that the first places they stop to feed are the places in which they are going to nest.

40 Do the same birds return to the same area every year, or has no work been done on this?---No, I have no knowledge of that.

45 Okay. Let us just go back - - -?---But in my general knowledge of birds and my general understanding of birds I would say there was a very strong likelihood that birds which have used an area for breeding will use that same area for breeding again at some stage.

But you can't state that categorically with respect to the swift parrot, can you?---I can't no.

Because simply no work has been done on capturing and banding them to find out whether, in subsequent years, the same birds are returning?---That's correct.

5 And that would be the standard procedure to adopt, wouldn't it?---That would be, yes.

You would catch birds, band them, come back the following year, catch them again and see whether or not you have caught the banded birds?---Yes.

10 And if you caught the banded birds it would indicate they were returning to the area?---Yes. There was an instance where a lady in the north of the State near Spreyton fed them over a number of years and there were a number of birds which had specific markings on which did return more than one year so that is some evidence they return to the same areas.

15 And that was reported to you rather than being observed by you?---It was both. Right. And Spreyton - - ?---Because I was in regular contact with this lady.

20 Spreyton is inland from Devonport, your Honour.

All right. Now, I neglected to ask you; they do occur in the south-west around Lake St Clair don't they?---Yes, they have been recorded there.

25 In fact do you know whether or not they have returned to that area this year?---I would expect it's extremely unlikely because those birds which were recorded at Lake St Clair were recorded there post breeding and this is a point I wish to make - I am not sure where you are leading me but it seems clear to me that, or I would like to stress that birds are principally on the east coast and to some extent the north coast, but the birds on the west coast are birds which have moved post breeding and prior to migration. As other feeding resources become available, they move in and occupy these areas prior to heading to the mainland.

30 Do you know Mark Holdsworth?---I do.

He is the project manager for threatened fauna, is he not?---Yes.

40 And he is with the threatened species section, biodiversity conservation branch of DPIWE?---That's right.

All right. And if Mark Holdsworth had reported flocks of swift parrots active around the visitors centre at Lake St Clair that would surprise you, would it?---When, or what time?

45 Now?---Now?

Yes?---Yes.

That would surprise you?---It would, yes. At this time of year, if you are talking about today. If you are talking about a month ago - - -

I am talking about recent times, last couple of days - - -

5

MS MORTIMER: Well, your Honour, the witness obviously is asking that the question be specific and, in my submission, if the answer is to be helpful my learned friend ought to ask a specific question. Today or a month ago or whenever.

10

HIS HONOUR: As you were making your objection he said, "The last couple of days".

15

MR D. GUNSON: In the last week, if the birds had been reported at Lake St Clair and active around the visitors centre there would that surprise you?---Yes, it would.

20

And it would indicate to you that there is a likelihood that those birds are there for breeding purposes?---At this time of the year, yes.

And similarly if they had been reported in the Gog Range you would expect them to be there for breeding purposes at the present time?---That's right.

25

Yes. And if they were at Summerleas - do you know where Summerleas is?---Yes.

30

Could you tell his Honour where that is?---It is just around Kingston. It is north of Kingston up into the - I presume you are talking about up in the valleys around Summerleas?

I am talking generally Summerleas?---Do you know where Kingston is, your Honour?

35

HIS HONOUR: I do, yes.

MR D. GUNSON: If one goes inland from Kingston, one comes to Summerleas before you get to basically the base of the mountain. Is that a fair assessment?---That's right.

40

Good. We agree about that?---Yes.

45

And you would expect them to be at Summerleas at this time of the year?---I don't expect them to be anywhere particularly but I am not surprised in the least if they were at Summerleas.

And you wouldn't be surprised to learn that there is reasonable numbers of the birds in Summerleas already?---Not at all.

Right. Would you expect them to be on Maria Island by now?---Yes.

And you would expect significant activity at Maria?---If the birds were there I would expect them but there have been a number of years when there has been no birds there at all.

5

But you would expect them to be there now under normal circumstances?---Well, it depends what you mean. If there are the resources available on Maria Island and they are using them I would expect them to be there but I don't expect them to be anywhere in particular at any time.

10

Because they are so unpredictable?---They're relatively unpredictable. I think there is a bit of method in their unpredictability in that they use, for example Maria Island is well known as a breeding area where they occur and when the resources are available I am sure they will use Maria Island. If there are resources available on Maria Island I would expect them to be there rather than not there if you understand what I mean.

15

I do. I followed that. And the Meehan Range, where is the Meehan Range?---Meehan is fairly close to Hobart. It is between Hobart and the airport and extends northwards.

20

In the area also known as Mount Rumney?---And beyond.

Yes. And are there swift parrots there at this time of the year normally?---I have, on many occasions, seen them there and breeding there and I understand that they are there this year.

25

All right. And Bruny Island, there is a population that goes to Bruny Island regularly, is there not?---Yes.

30

And you expect to find them at Adventure Bay in the south of Bruny Island?---I have found them there on occasion.

In blue gums?---In blue gums, yes.

35

Yes?---Feeding in blue gums.

Yes?---And at Roberts Point on Bruny Island?---Yes.

40

And Roberts Point is on the channel side of Bruny Island, is it not?---It is indeed.

And Roberts Point is an area where there is a number of houses?---A very small number of houses.

45

Yes?---There are - Apollo Bay there are a number of houses - a string of houses, if you like.

Are they in Apollo Bay as well?---I am not aware of that but I know that they are on Roberts Hill.

5 Which is above Roberts Point?---Which is above Roberts Point. It is very close to Apollo Bay.

Yes. So you would expect them to be in Apollo Bay as well provided there is feeding material there?---In the area generally.

10 Right. Now, at Roberts Point of course is where the Bruny Island ferry comes ashore, isn't it?---That's right.

And a very noisy area, lots of cars, lots of trucks, lots of buses?---Intermittently, yes.

15 Yes. That doesn't affect the parrots at all?---No, not in the feeding. Not when they are feeding and my understanding is that their nesting is a fairly substantial area away from where the vehicles are. But in feeding, I'd make no bones about that, that swift parrots will feed within feet of people.

20 They are recorded in the Launceston area for feeding purposes and breeding, I suggest?---Yes.

25 And in around the Evandale area?---I take your word for it. I wouldn't dispute it.

Well, please don't do that, but this - do you know?---I wouldn't dispute it, but I don't know.

30 All right. And I think you said in your affidavit that there is a small resident colony of birds that does not migrate to the mainland?---No, I didn't say that. If you interpreted that you misinterpreted what I said. I said that in some years a small number of birds will remain within Tasmania. Now, that occurred in the year when I did my survey, and since then I have never seen, although I keep
35 my eyes open for swift parrots all the time, I've never seen a swift parrot in Tasmania. Well, I may have seen them on one occasion, but on most occasions they don't remain within Tasmania, in most years.

40 HIS HONOUR: The matter is adjourned until 2.15.

MS MORTIMER: Might I ask that your Honour wait in the ante-room for five minutes? There is a matter I want to raise with my learned friends, and it is arising out of exactly what we are talking about at the moment, and I want to -
45 well, if your Honour would prefer to deal with it at 2.15, I am happy to do that.

HIS HONOUR: I have got a commitment that I am already 15 minutes late for.

MS MORTIMER: I am sorry, your Honour. That will be fine. If your Honour pleases.

5 **ADJOURNED** [12.46pm]

RESUMED [2.15pm]

10

PETER BROADBENT BROWN:

15 MS MORTIMER: Your Honour, if I can raise the matter that I foreshadowed before lunch and it is this: your Honour, it has been ascertained that there are swift parrots breeding and feeding on Bruny Island which is very close to Hobart and we propose, your Honour, and it is agreed to by the other parties at the bar table and interveners, that it would be appropriate for your Honour to have a short view and the date that we are looking at is Monday, your Honour.

20

HIS HONOUR: Yes.

25 MS MORTIMER: There is - urgency is not the right word - but it is important to seize the moment, so to speak, your Honour, one can never be quite sure when the breeding is going to finish. Mr Kennedy, who is one of our swift parrot experts, has recommended that if that is to be done there are two important aspects to it. The first is that it occur fairly early in the morning and the second that the party who goes over be limited to no more than 10 people.

30 HIS HONOUR: That is 10 people altogether?

35 MS MORTIMER: Altogether. So our proposal at the moment would be one counsel for each of the applicant and respondent, one counsel from the Commonwealth, the State has indicated they do not wish to participate again, for each of the applicant and respondent two additional people - I have lost count.

HIS HONOUR: That brings up seven.

40 MS MORTIMER: Seven, thank you, your Honour.

HIS HONOUR: And with myself and my staff is 10.

45 MS MORTIMER: Yes, your Honour. And that gets us to the limit. I have been told, your Honour, that there is a ferry across at 8 o'clock in the morning on Monday - a quarter to eight.

HIS HONOUR: Yes.

MS MORTIMER: Now, I don't know how that will suit your Honour's timetable in terms of when your Honour might be coming down from Melbourne.

5 HIS HONOUR: No, I will be here then and I generally rise at 5.15.

MS MORTIMER: Well, your Honour will be in plenty of time then. Mr Tree is suggesting an earlier boat and I overrule him on that one.

10 HIS HONOUR: I also fall asleep on the couch at about 10 o'clock at night.

MS MORTIMER: And we have been informed that we need - we have permission from the land owners, your Honour, it is a site that is on private land and we have permission from the land owners.

15

HIS HONOUR: Where do you get the ferry from?

MS MORTIMER: Kettering.

20 HIS HONOUR: Kettering.

MS MORTIMER: Four wheel drives are needed, your Honour, and we would - pardon me. We will be able to provide two four wheel drives.

25 HIS HONOUR: So what time would we need to meet at the Kettering ferry drop point?

MS MORTIMER: 7.30 your Honour.

30 HIS HONOUR: So if we assembled there and the parties could direct us from there or take control of the situation from there.

MS MORTIMER: Yes.

35 HIS HONOUR: And is there somewhere where you could leave a car for a considerable period of time near the Kettering ferry?

MS MORTIMER: Yes, there is, your Honour.

40 HIS HONOUR: All right.

MS MORTIMER: And we would propose that it would be completed in good time for us to be able to resume sitting here at 2.15.

45 HIS HONOUR: So if we were to leave from the Court basement at 7 am we would easily be at Kettering by 7.30?

MS MORTIMER: Yes, your Honour.

MR D. GUNSON: I think I would allow a little longer than that if your Honour does not know the way. Forty minutes would be on the safe side to get there at 7.30.

5 HIS HONOUR: Yes, so 6.45?

MR D. GUNSON: I think so, your Honour, yes.

10 MS MORTIMER: And your Honour perhaps in terms of firming up those arrangements we could communicate by email with your Honour's associate and circulate again a little proposed itinerary and we will attempt to attend to that this afternoon.

15 HIS HONOUR: He is going back to Melbourne this afternoon. It may be best if anything you have you lodge in the Registry and then they can - - -

MS MORTIMER: Your Honour, would not prefer us to do it by email?

20 HIS HONOUR: I am just not sure whether that is going to have much utility.

MS MORTIMER: Oh right, I see.

25 HIS HONOUR: Mr McKenna is volunteering to go via our chambers in Melbourne on Sunday night.

MS MORTIMER: Well, that is very kind of him.

HIS HONOUR: So if you email to him that would be the best, yes.

30 MS MORTIMER: That is very kind. If it is possible, your Honour, we will try and get it to the Registry. Would that be your Honour's preference?

HIS HONOUR: If you can do both.

35 MS MORTIMER: All right, we will do that. If your Honour pleases.

HIS HONOUR: And what is planned for the rest, what time would we be back?

40 MS MORTIMER: We would be back to resume sitting at 2.15 your Honour and we are unsure at the moment which witness we will be up to by then.

HIS HONOUR: Yes, thank you.

45 MS MORTIMER: It will be parrots though, your Honour.

HIS HONOUR: Yes.

MS MORTIMER: Yes. My learned friend Mr Gunson reminds me that there is an agreement to interpose Dr Meggs - Mr Meggs - - -

HIS HONOUR: Mr Meggs, on Tuesday and Wednesday.

5

MS MORTIMER: - - - on Tuesday and Wednesday.

HIS HONOUR: Yes.

10 MS MORTIMER: And Mr Mooney Thursday, we have got, your Honour. So there are three witnesses who are dealing with parrots for us and it seems unlikely that we are going to get through all three of those.

HIS HONOUR: We might have to resume them in February?

15

MS MORTIMER: Yes, your Honour, that is right. If your Honour pleases.

HIS HONOUR: And driving to Kettering, is that - do you head down towards Kingston?

20

MR D. GUNSON: That is right, your Honour. Your Honour, will go through Kingston and keep going keeping the Channel on your left.

HIS HONOUR: It is signposted from Kingston?

25

MR D. GUNSON: Yes.

HIS HONOUR: Thank you.

30 MR D. GUNSON: Keep going down the Channel and the road to the ferry is fairly well marked off to your left.

HIS HONOUR: Yes, thank you. Now, Ms Mortimer, you had completed your evidence-in-chief, it is Mr Gunson's cross-examining?

35

MS MORTIMER: Yes, Mr Gunson, should resume his cross-examination.

HIS HONOUR: Yes, thank you.

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

Mr Brown, I want to come back to the distribution of the parrot and we are going to be there for a little while I am afraid. You have given us a fairly good detailed description of where the parrot is found in Tasmania. Where specifically does it nest? Am I right in thinking that it will nest anywhere it can find a reasonable hole in a tree?---I don't believe that to be the case.

45

What is your belief as to what the parrot requires?---My belief is that the parrot - I think the major trigger in this whole process is the feeding habitat and most

of the feeding habitat is reasonably close to the coast. It is closer to the coast generally than is the breeding habitat is forest, it has got to obviously be old forest, forest which is old enough to maintain hollows. In my experience the nests are invariably in continuous forest and they are, as I said before in old
5 forests which tends to be fairly open and the trees are often extremely broad and very much branched, but not always.

So provided those criteria are satisfied is it fair to assert that it will nest on the east coast of Tasmania from say the St Helens area down to Southport
10 Lagoon?---I'm not really able to say that because in my experience they seem to use areas which they use on a regular basis. They may not be used on an annual basis, but they are used on a regular basis and there are other areas which may be overlooked which appear to me to be perfectly adequate for them.

15 All right. So it doesn't follow that every hole in every tree is necessarily a nesting site?---That's correct. That would be my interpretation.

So it follows that it is very much up to the bird to decide which particular hole it might like to make its nest in?---Yes.

20 And is it not the case that nests can be not used by the birds for years on end and then all of a sudden in one season they will start to nest there again?---That's probably the case, yes.

25 There is not a great deal known really about their nesting habits, is there?---I think there is a reasonable amount. I think there is sufficiently known about their nesting habits to be able to make judgments when one finds where the birds are active.

30 Can we assume that they nest at Southport Lagoon or in that area?---Yes, in that general area, yes.

Can we assume that they nest in the St Helens area?---That would be correct, yes.

35 And we can assume that they nest in all points between that satisfy the criteria that you have just mentioned?---If the criteria are satisfied, yes.

40 We know they nest on Bruny Island?---Yes.

And they nest on Maria Island?---Yes.

45 What about Schouten Island?---No. To my knowledge, they don't nest on Schouten Island.

Have you checked that yourself?---I have, yes.

All right. And in the north-west?---But I would say in part that I have only checked it on one occasion.

All right. Now, they nest obviously in Summerleas?---Obviously, yes.

5 Yes. And they nest in the Meehan Range?---Yes.

And they obviously nest in the Binalong Bay/Humbug Point area?---Yes.

Which is north of St Helens?---That's right.

10 How far north of St Helens will they go?---As long as there's - Binalong Bay/Ansons Bay is probably as far as the Blue Gum feeding resource goes, and I don't think they go much further than that.

15 Ansons Bay is how far north of St Helens?---I'm not sure. Twenty kilometres perhaps?

I was going to suggest to you about 30/35?---Could be.

20 You wouldn't quarrel with that?---I wouldn't quarrel with that.

And north of that area?---No. We have no - to my knowledge we have no records of them breeding north of that area.

25 All right. So we have got a fairly large breeding area, haven't we?---We've got a fairly broad linear, long linear area.

A linear breeding area which extends at least 10 kilometres inland from the coast?---I would say in general to a maximum of 10 kilometres inland.

30 All right?---Birds actually can breed fairly close to the coast.

And if birds are currently in small flocks around the visitors centre at Lake St Clair at this stage of the year, would it be reasonable to assume that they are there for breeding purposes?---It's something of a surprise to me, but that is a possible interpretation, yes.

35 Right. It would be a reasonable interpretation, wouldn't it?---They could well be non-breeding birds. That is a strong possibility.

40 But equally they could be breeding birds?---Equally they could be breeding birds, I would accept that.

Because you wouldn't have expected them to be at Lake St Clair by this stage, would you?---No. As I said to you before, I am quite surprised to learn of that.

45 Right. And if that evidence was given by Mark Holdsworth that they were in that area at a later stage then you wouldn't quarrel with that obviously?---And the record is recent.

Yes. Now, on the north-west coast they are recorded as breeding, aren't they?---Breeding this year?

5 No. In the past they have been recorded as breeding?---Indeed. That's correct, yes.

So we can now extend their breeding habitat across the top of the State along the north-west, can't we?---Some birds do breed along the north-west, yes.

10 Yes. And they breed as far west as Smithton?---Yes.

So we have got them breeding Smithton right across to Devonport?---Are you seeking answer on that?

15 Sorry?---Are you seeking answer on that?

Yes, I am. You would agree with that?---Yes.

20 And you have them breeding in the Launceston area; correct?---Yes.

Quite extensively around Launceston they have been recorded as breeding, haven't they?---I do believe there are not particularly large numbers recorded breeding in the Launceston area. And I have information, albeit anecdotal, that there has been a considerable reduction of breeding birds in the Launceston area according to one of Tasmania's most experienced bird observers, and that is
25 Bob Green.

30 Bob Green, yes. But Bob Green has found them in abundant numbers in the Launceston area and around Legana, north of Launceston, has he not?---In some years he may have done.

Yes?---Although that is his interpretation of abundant. I have no idea what that might mean.

35 But Bob Green has been an ornithologist with a good reputation around the State for the better part of 60 years plus, hasn't he?---But on the other hand he may have not previously seen more than 10 and then he saw 20 or 30, which he may interpret as being abundant.

40 Thank you for that. Now, do they breed in the Scottsdale area?---Not to my knowledge.

They have been recorded as being prevalent in the Scottsdale area, haven't they?---Possibly at certain times.

45 In your paper The Swift Parrot, a report its ecology etcetera - - -?---Yes.

- - - which I think was published in 1989, you said that there had been a single record - this is in 1989 - you said this:

...of large numbers at Scottsdale in early January 1967.

- 5 Now, is January still the breeding time?---January is generally post breeding.
- Right?---Well, some birds can be breeding, but generally it is post breeding at that time.
- 10 And if they were collected in large numbers, would that be an indicator that they were breeding in the area?---Not necessarily.
- Doesn't necessarily follow?---No.
- 15 Right, thank you. And I think you have said also in your report with respect to parrots in the Devonport area it is not known where these birds breed but it is thought to be in some of the tall forests to the south of Devonport, and you would adhere to that?---Yes. I think subsequently birds were found in the Gog Range which may have been those particular birds which were feeding.
- 20 When you wrote your report which was 1989 you also described the birds as being prevalent in central Tasmania, did you not?---I did, yes.
- You said in fact:
- 25 *In central Tasmania including most of the high country to the west of the main Hobart/Launceston highway there have been a substantial number of records right through the summer period. During the survey period, most parrots though were located in the plateau area before mid-December.*
- 30 Now, do you stand by that; that there are records showing that the high country to the west of the main Hobart/Launceston highway that these parrots are prevalent?---This refers to post breeding.
- 35 Yes. Just looking at the general distribution as well, you don't quarrel - - -?---I don't take any issue with that. In my report I have got my map showing distribution of the parrots and they occur all over Tasmania.
- 40 Yes. And you recorded at least one breeding pair at Miena in 1991, didn't you?---Well, I didn't recall that one. It has been recorded.
- Yes. Narding recorded it?---That's right.
- 45 And you accepted that as a valid observation?---He is a very good bird observer, yes.
- And would you tell his Honour where Miena is?---Miena is at the bottom hand of Great Lake in the centre of Tasmania on the plateau in the high country.

So if we accept Narding's report, at least one pair had bred in the middle of Tasmania?---Yes, I accept that.

5 In probably what would be regarded as one of the coldest areas in the State at any time of the year?---Indeed.

10 Yes. All right. So we have got the breeding area basically 10 kilometres from the coast inland and it is a linear - - -?---Up to 10 kilometres, yes. And obviously there are exceptions.

Yes?---I mean, it is very difficult to draw a hard and fast line. But generally as I think I have said in my reports, that generally breeding is within 10 kilometres of the coast. Of course there will always be exceptions.

15 And Launceston of course is not within 10 kilometres of the coast, is it?---Well, it is within 10 kilometres of a large water body which is the major river, and I interpret that in the same way as I interpret New Norfolk where I recorded birds in that area. And they're on a water course which is adjacent to the coast. It seems to be this relationship between rivers and coasts and - well, generally
20 rivers and coasts. But I think they - my interpretation is that they are capable of - or they're attracted by habitats along large water courses so they will breed up the Tamar just as they will breed up the Derwent River, which are the two largest rivers in Tasmania.

25 So can we add to the breeding list the area around New Norfolk now?---I think we can, yes.

Does your Honour know where New Norfolk is?

30 HIS HONOUR: North of Hobart, isn't it?

MR D. GUNSON: Well, it is on the - - -?---North and slightly west.

35 It is north and slightly west on the Derwent, about 45 kilometres away?---I would put in the 30 to 35.

40 We won't argue about 10 kilometres. And have you gone further up the Derwent River looking for them up along that roadway?---I have looked at them all, yes.

And have you found breeding pairs, say between Lake St Clair and New Norfolk?---No.

45 Have you been looking for them during the breeding season?---Yes.

All right. And was it a large population breeding in the New Norfolk area?---I didn't see them breeding. I have to admit this, the birds were actually feeding in large blue gums in and around New Norfolk.

At a time though when they should be breeding?---During the breeding season, yes.

5 So it would be reasonable to expect that they are breeding birds?---Yes.

Now, what about the Huon River, which is another large river and obviously flows over quite a considerable distance? Have you found them in the areas on either side of the Huon River?---I have, yes.

10 Whereabouts?---I found them at Huonville itself.

Yes. And during the breeding season?---The ones that I found in the Huon had been feeding on eucalyptus ovata and that is prior to the breeding season so they are generally found in those areas, feeding on those particular trees, prior to the breeding season and then they tend to disappear during the breeding season so presumably they are moving on to other food sources.

15 But not necessarily a long way away?---Not necessarily so but some Summerleas Road isn't very far away.

20 But you would expect them to breed in the Huon area if they were feeding their during the breeding season?---I wouldn't be surprised if there were some breeding in the Huon area, no.

25 All right. If I could take you please to the paper you wrote "The Swift Parrot" - do you have a copy in front of you, Mr Brown? If I could ask you please to turn to page 21 and look at figure 3?---That's the map?

30 That is the map?---Yes.

And if you look first of all at the Bass Strait islands and first of all to Flinders Islands you have got records showing the parrot present on Flinders Island. Has it been identified as breeding on Flinders Island?---No, not to my knowledge.

35 Not to your knowledge? You don't rule it out though as a possibility?---I never rule anything out with the swift parrot.

40 All right. I mean if we look logically it is an extended line, isn't it, coming down the coast?---Well, that's right. I could interpret that but I could also say it is on the migratory route.

Yes. And if we look then at King Island, it has been recorded there?---It has, yes.

45 And has it been recorded breeding on King Island?---No.

Again would you rule that out?---I think probably in the case of King Island it can - - -

5 Because of the vegetation?--- - - - because I have had many, many visits there over many years and - I will probably be making a liar of myself but I can't recall having recorded it myself but I have been many times and I am not absolutely certain about that.

But it is certainly recorded there, isn't it?---It is recorded there, yes.

10 Right. So that shows a very extensive distribution of the parrot since - and those records are in 1980?---Yes.

15 Would it be reasonable to suggest that in the 25 years that have passed the map has probably been - I withdraw that - that the population would be now shown differently in terms of its distribution?---I don't think it would be markedly different. There may be more dots on the map but it pretty well covers most of Tasmania as it is.

20 All right. You have got it down the very bottom I think probably marked at Maatsuyker Island - - -?---Oh yes.

HIS HONOUR: The figure 3 on page 21 says:

Records since 1980.

25 MR D. GUNSON: 1980, I am sorry, your Honour.

HIS HONOUR: So that would presumably - - -

30 MR D. GUNSON: So that would be 1980 to 1989. My error, your Honour, yes.

So you have got it marked at Maatsuyker Island at the very bottom?---I would suggest that that is either a stray bird or an aberrant record.

35 But you don't know?---But I don't know but I do know the habitat on Maatsuyker and it would be a hostile environment for swift parrots.

40 HIS HONOUR: We have a vagrant parrot as well as a vagrant beetle?---there are lots of vagrant parrots. That's what keeps bird watchers interested in bird watching.

MR D. GUNSON: Now, if I could take you to page 23. At the last paragraph on page 23 you said:

45 *Further north on the Forestier Peninsula no birds were recorded during this survey other than at Eagle Hawk Neck but there is adequate feeding and breeding habitat throughout and there are almost certainly breeding swift parrots there.*

So you had them breeding down on that peninsula as well?---I think there is a strong possibility that in certain years they would breed there.

On the Forestier Peninsula?---Yes.

5

Thank you. At page 25 under the heading Northern Tasmania, there is this entry:

10 *In the Launceston area swift parrots were formally more abundant than at present.*

And you refer to R.H. Green, who is Bob Green?---Yes.

15 *Small numbers are now seen regularly at Legana and around Launceston. Green remembers years of abundance when they were seen feeding in the parks and breeding in holes in the retaining wall of the Trevallyn dam as well as in hollows in old trees in the park.*

20 Now, as I understood your evidence a little while ago you said they basically bred in a forest. Now, here is a report of them nesting in hollows in old trees in the park and in the retaining wall of the Trevallyn dam?---I find that quite extraordinary but I don't take issue with Mr Green who was, as I said before, a recognised ornithologist of some note but I have never, to my knowledge, seen swift parrots breeding in towns and around Hobart in particular where there are
25 swift parrots in most years and I think it is fairly aberrant behaviour. That is how I would put it.

30 Bob Green worked for the Launceston Museum for 45 years or more I would suggest?---Yes.

And it is reported here in November 1987:

35 *One bird was rushing around from branch to branch of a giant sequoia tree outside the entrance to the Queen Victoria Museum. It was obviously looking for a nest site.*

That is what you have reported, haven't you?---That's my own record, yes.

40 That is your record, isn't it?---Yes.

And do you dispute that record now, that you have got a nesting bird in the heart of Launceston and popping around from branch to branch outside the museum in the city?---I dispute that it was nesting because it wasn't nesting.

45 Did you see it?---Yes, I did. I recall it well and it could have been a first year bird which wasn't necessarily breeding that year or didn't have a mate. They practice these things prior to breeding so the fact that I didn't see it breeding, and I watched that particular bird for some time, really doesn't indicate that the bird was breeding. It was probably learning.

Learning to breed?---Learning to find a nest site and learning about life in general.

5 But it was doing it in the heart of Launceston?---It was indeed. I don't dispute that.

In the grounds of the museum?---Yes. Right outside the museum.

10 Yes. Well, do you dispute the report that you have recorded there where Bob Green:

15 *Remembers years of abundance where they were seen feeding in the parks and breeding in the holes of the retaining wall of the Trevallyn dam as well as in hollows of old trees in the park.*

?---I told you before that I didn't dispute that, that I just find it aberrant behaviour. I find it extraordinary but I don't dispute it - - -

20 Sorry, go on?---No, it is just because I have a great respect for Bob Green as an ornithologist and I believe what he says.

25 If Bob Green had reported that as a fact you would accept it, wouldn't you?---Yes.

There are two facts there. First of all nesting in the holes of the Trevallyn dam and secondly, nesting in hollows in the parks in Launceston?---Yes.

30 Now, first of all the Trevallyn dam would be what, about five or six kilometres away from the centre of the Launceston City?---Yes, that would be a fair assumption.

And it is a large dam?---Yes.

35 And do these birds normally nest in the ground?---No.

Do they nest in walls?---No.

40 Surely it must have excited your interest to go and make some inquiries about it when you knew of this particular report?---I had - not particularly. I had other things I was doing. I was finding more general information on the parrot and remember that when I did my study, no previous work had been done on them.

45 Well, if they were nesting in the park here - - -?---It's a - what I - if I could just explain that whilst I didn't follow that avenue you may suggest that I should have done, but I didn't, and I've had quite a lot of experience with swift parrots since then, apart from the fact when I was doing my actual work, and I maintained an interest in them. I've never seen that sort of behaviour anywhere.

So I would say, and I would stick to what I said before, that I considered it aberrant behaviour.

On two occasions as reported by Bob Green?---Yes.

5

Aberrant behaviour in dam walls, and then nesting in Launceston City Park?---The dam walls certainly. Launceston City Park I find - I've got to be careful what I say here. I was going to say I would find more believable. I believe Bob what he said anyway, but perhaps less aberrant, but certainly it's unusual to find them actually breeding in a city in an urban environment.

10

They breed at Mount Nelson, don't they?---But they breed in forest in Mount Nelson.

15

But it is an urban area with forest around it, isn't it?---Well, it's - but where the birds are breeding is a substantial way away from houses.

And Mount Nelson, your Honour is just directly behind Sandy Bay. That is that long hill that runs across the skyline there. So look up from Sandy Bay right to the top and you have got Mount Nelson. You have got a lot of housing up there, haven't you? You have got schools?---Yes. Increasing amounts of housing, for sure.

20

That is right. And the housing is mainly set in a bushland environment, isn't it?---A lot of it is.

25

And the parrots are nesting quite close to the houses, aren't they?---No. Not to my knowledge. They're nesting - the areas where I've seen them nesting are well away from the houses.

30

How far away?---Oh, 700 metres I would say, something like that, at minimum.

And what about at Tolmans Hill? They nest up there, don't they?---I haven't recorded them nesting up there, but they may well do. Tolmans Hill is a very recent subdivision.

35

Yes. And it has the sort of trees around it that the parrots like?---It's - yes, it's potentially suitable forest.

40

And it is not all that far away from Summerleas, is it?---Well, I don't know. It's a reasonable distance away.

And what about between Mount Nelson and Kingston, in the bush covered hills there?---Yes.

45

They are found nesting there, aren't they?---Yes.

So it is quite extensive really, their breeding - - -?---When you say those hills between Mount Nelson and Kingston, that's the area I was referring to before, when I said they were breeding in the Mount Nelson area.

5 And that is an area probably five kilometres long, six kilometres long?---Something like that, yes.

Yes. So their breeding area is really quite extensive, isn't it?---I've never disputed that.

10

No. And they nest on the foothills of Mount Nelson, don't they?---On the foothills of Mount Nelson? I don't believe they do.

15

All right. What about the foothills of Mount Wellington?---Yes, they do, because Summerleas Road is the foothills of Mount Nelson, Fern Tree.

20

And particularly after the 1967 bushfires, with a large number of trees being burnt they formed a lot of hollows where the birds could then nest, didn't they?---I'm not sure whether you can lay the blame - I mean, those hills may have already been there. It's - one can assume that it may have done, but I think it's a bit presumptive to assume that the fires caused those hollows.

All right. Look, please at your report at page 75. The first caption there reads:

25

The forested hillside at Fern Tree and the foot hills to Mount Wellington, Hobart. This area was severely burnt in the 1967 bushfires, when perhaps half of the trees were killed. These have now formed many hollows, and is an important breeding area for swift parrots.

30

Now, do you say that the - you would accept event now that it is still an important breeding area?---Yes. It's many years since I first discovered it.

35

And does that extend, that breeding area, right around the foothills of the mountain?---No, I don't believe it does. It was a fairly restricted area where the birds were breeding, and when I located them. But I'm not sure about more recent investigations.

40

Right. So how long ago did you locate them breeding up there?---I think it was in - when I did my study. I'm pretty sure. I'm not absolutely certain, but I think it was '87.

And if you look at the caption to the next photograph, on page 75, is reads:

45

Forested gully and hill slopes at Oyster Cove.

Now, we will just stop for a moment. Oyster Cover is in fact where Kettering is, isn't it?---It's just short of Kettering. It's the next bay over. Yes, the next bay to the north.

*South East Tasmania swift parrots feed on the eucalypt globulus
growing in the gully, and breed high up on the slopes.*

5 So that is another breeding area, isn't it?---Yes.

The slopes at Oyster Cove?---I have to say that I didn't find any nests up there,
but the birds were zooming. But I wasn't looking for nests in particular, and I
do need to make this point that I was trying to locate populations where they're
10 feeding, and on occasions I saw them heading up the mountains, and I'm
assuming that they were breeding up there.

Well, this is your definitive paper, isn't it?---It's my paper.

15 And no doubt you were trying to be as accurate as possible when you wrote
that paper?---Well, I was, yes.

And you weren't going to exaggerate the population, were you?---Exaggerate
what?

20

You weren't going to put information in there that was untrue, were you?---No.

No. And you stated that they breed high up on the slopes. Was that your belief
at the time?---Yes.

25

And remains your belief?---And remains my belief. If birds are feeding in that
area they will breed up in the higher areas. This is a fairly standard character.
In virtually every area we found them feeding they tend to move higher up the
hills. Sometimes they'll actually feed very close to the areas where they will
30 breed.

What I am trying to establish from you is where their breeding areas are in
Tasmania?---Right.

35 So can we continue then down the Channel perhaps, and go south of Kettering,
or south of Oyster Cove, and where else have you found them breeding around
the Channel?---I've found birds feeding at Woodbridge.

40 Yes?---And I found birds down in Southport Lagoon. I've also found - - -
Just stay with the Channel for the moment?---Sure.

You found them at Woodbridge - - -?---Yes.

45 - - - which is about another 15 or so kilometres south of Kettering?---Yes.

What about further around to, say, Verona Sands?---I don't think I found them
in that area.

Yes?---You'll probably point somewhere where I did find them, but it would be in my report if I found them there, but I don't recall having found them.

5 That is all right. Whereabouts in the Channel have you found them? What about the Cygnet area?---Cygnet?

Yes, and the hills above Cygnet?---Port Huon, I have found them there.

10 All right?---But they were feeding in a - yes, they were actually feeding in eucalyptus ovata on the coast and I think I found them feeding in some blue gums a little bit higher up the hill. So yes, I think it's fair to assume they were probably breeding there as well.

15 Can we basically assume that they breed right through the Channel area?---We can assume that when conditions are right they will breed through the Channel area where there are favourable feeding resources, I think that's a fair assumption.

20 What about the Tinderbox area?---Yes.

Which is just adjacent to Bruny Island?---Yes.

25 North West Bay?---I'm just trying to think of any locations. I can't recall anything in North West Bay, although I wouldn't rule it out. There may be some in the Conningham area, potentially.

30 All right. So generally we can assume they are breeding right down the Tasmanian East Coast, right down through the Channel area as far south as Southport Lagoon?---Yes.

What about near Dover? That is not all that far from Southport Lagoon, is it?---No, I have found them at Southport itself.

35 Right. Then it is some distance on to Southport Lagoon, isn't it?---Yes - oh, no, Dover, it's across the water Southport Lagoon, it's not very far away at all.

40 All right. And what about as far south as Cockle Creek? This is not a geographical tour of Tasmania I assure you, your Honour?---Cockle Creek is the southern end of Southport Lagoon.

Yes, appreciate that, but what about - - -?---And I think they have been recorded there, I'm not sure whether I ever recorded them there.

45 All right?---And I'm not sure when.

So we can accept from all of that, can't we, that the bird has an extensive breeding area throughout Tasmania?---You seem to be assuming that all these areas are available all the time and that's something I wish to dispel.

Well, we will come to that in a little while if you don't mind. I want to deal with population numbers now. In your report in 1989 you said the total breeding population was then 1320 pairs?---That was my estimate.

5 We will get to that in a minute. There is no real way, is there, of determining the exact population?---It's very difficult, it's very, very difficult, particularly with such a nomadic species.

10 Well, it is nomadic and it is fast?---Ephemeral.

And it is very difficult to spot; correct?---No, that's not correct, it's not difficult to spot. It's a noisy bird when it's active and when they're flying they're calling all the time. So when there are swift parrots in any one location they are fairly easy to locate.

15 In your paper at page 88 you set out that there were 1320 pairs. Just turn to that, please?---Yes.

20 And if we quickly run down the page you will see that in the Southport Lagoon and Recherche Bay area there were 30 pairs. Then you moved down to Southport north to Strathblane and Strathblane is just near Dover, isn't it?---Yes.

25 There were 40 pairs. Strathblane to Geeveston, 60. You had a large number Geeveston to Huonville of 60 to 70, and then we just run down quickly, Kingston to New Norfolk, 120 pairs, and so you go through to South Arm even you had 10 pairs; correct?---Yes.

30 Now, South Arm is that specifically at South Arm or in the hills beyond South Arm?---It would refer to the whole of that South Arm area not specifically at South Arm. I don't recall any habitat at South Arm in particular.

35 All right. What about at Tea Tree? Now, Lauderdale is on the coast, isn't it?---Yes, it is.

And Tea Tree is inland, isn't it?---Tea Tree is, yes.

40 Inland from Richmond even? So probably about 40 kilometres from the coast?---Tea Tree, no, it's 10, 15 kilometres from the river Derwent.

But from the coast?---From the coast perhaps. I'm not sure I'd have to look at it on a map.

45 It is all right. Tasman and Forestier Peninsula you had 70 pairs and then in the Dunalley north to Orford you had 110 pairs; correct?---Mm.

Now, Dunalley is inland from Marion Bay, isn't it?---It's further along - yes.

Further along the coast but probably about - - -?---Across the peninsula isthmus.

5 Yes, probably about, what, eight, nine kilometres from Marion Bay?---Yes, that would be fair.

All right. So just taking into account your Marion Bay limits at the moment. So if we call Dunalley Marion Bay for the sake of argument and go north to Orford when this survey was done in 1989 or thereabouts 110 pairs were found in that area?---Yes.

A reasonably large area?---Oh, it's a very large area, yes.

15 Very large area. And you wouldn't quarrel that that represented at that time something like 8 per cent of the population?---No.

20 Now, do you know the current population of the bird?---The current estimate, my understanding is of around about 2500 birds, I think, adult birds which one could equate to 1250 pairs. So it's somewhere between 1000 and my figure there.

So the population is fairly stable, isn't it?---We don't know.

25 Well, that is the problem, isn't it, you really can't ever work out the total number of birds in the State, can you?---Surveys are undertaken on the mainland.

30 If we could just confine ourselves to Tasmania, the numbers that come here?---To my knowledge there have only been two surveys undertaken. The first one is mine and the second one was done some years later when I think the figure was something like 920, 30, 50, pairs. But yes, I have to agree with you that that figure is a guesstimate and a number of people have looked at the figures and they say they consider that they're reasonable. The scientific advisory committees have looked at them and they consider that that's a fairly good picture of what the population might be.

35 But by the same token as you properly concede it is really very much a guesstimate, isn't it?---It's very difficult, yes.

40 And it is a guesstimate?---And it's a guesstimate, yes, but it's a qualified. I mean, it's not just a guess out of the hat.

Oh, no, I am not suggesting that?---And it's based on good information.

45 It is based on observations at certain times and then taking into account certain factors and multiplying them, isn't it?---Yes.

HIS HONOUR: Would you describe it as an educated guess?---Yes, I think it's a fairly - I would say very educated guess but perhaps I'm biased.

MR D. GUNSON: That is what is called to lawyers, a life-raft.

5 But if somebody suggested five years after your survey that there were 1200 pairs in existence that figure would be as much an estimated guess as yours of 1320, wouldn't it?---Where did that figure of 1200 pairs come from?

10 Just suggesting. If somebody had suggested five years after your figure was calculated that they had arrived at 1200, you would basically say, "Well, that's about right"?---Yes. I mean if it differed markedly from mine I would obviously be very concerned either about my figures or their figures.

But the figures appear to be reasonably consistent over the years?---Yes.

15 You are not suggesting there has been any marked decline in the species say in the last 10 years are you?---I don't think we have a good enough handle on the population determined, to determine what that might be and that has been one of the problems with the species, that there has been very little information on dispo population but the generally accepted figures are a fairly low population in that area that I found.

20

In your report at page 99 - could you turn there please?---Yes.

You say in the last sentence in that first paragraph:

25 *However, in such a fast growing species the rotation age may be as low as 12 to 15 years and in reality it is useful life to swift parrots may be less than five years. Provided that plantations are created regularly within any given area though there should always be some useful feeding resource available.*

30

Now, when you are talking about rotation age, what are you speaking about?---I believe I was speaking about the information that I had available then of something like 17 years I think it was.

35 All right. Rotation of what?---Of blue gums.

And you suggest that:

40 *Provided plantations are created regularly within any given area though there should always be some useful feeding resource available.*

Do you remain of that view?---I actually don't, no.

45 You have changed your mind?---Well, yes, because I am concerned about the potential of them as a feeding resource and they are not particularly - in a tightly grown context as a plantation, generally eucalypts don't flower so readily as they do in an isolated - an open situation and also in my experience there have been very, very few records of swift parrots actually feeding in plantations and

this is of concern to me that they are probably not of any great value. I have come to that conclusion since I wrote that.

5 So you have changed your mind since then?---Yes.

And when did you do that?---Over the years.

Have you published anything to that effect?---No, I haven't.

10 Have you made your views known?---I have discussed it with a number of people, yes.

When did you retire?---Two and a half years ago.

15 And your position when you retired was what?---I was Senior Policy Officer with the Nature Conservation Branch of DPIWE.

20 Yes. And you had no doubt many conferences and discussions with personnel of Forestry Tasmania concerning plantation growth?---I may have done. I can't particularly recall any.

Did you ever raise your concerns with Forestry Tasmania?---I honestly don't recall.

25 All right. In the next paragraph you said this:

30 *It is unlikely that a plantation cycle at less than 50 years will ever provide nest sites and so birds will have to breed elsewhere. A feeding resource, however, is almost certainly much more limiting than nesting habitat. Swift parrots feed on very few eucalypts during the breeding season. They will breed in any tree provided it has an adequate hollow.*

Do you maintain that?---No.

35 So you have changed your mind about that have you?---I've gradually come to that conclusion and particularly since I have had to focus on the species that they - I don't necessarily think it is any specific hollows but there are certainly specific locations where I believe that the birds have their preferred breeding habitats. The only breeding habitat that is available or whether it is a preferred
40 breeding habitat, I am not able to say but clearly places like Roberts Hill, like the Meehan Range, like Wielangta, these areas, these birds come back to time and time again. Now, whether they are using the same nesting sites I am not able to say but I know that they are using the same areas and the probability is that they may well be using the same nesting sites but I am not able to say
45 categorically.

And no-one has carried out any research to establish whether that is or is not the case, have they?---Not to my knowledge.

That is right. The proposition that they will breed in any tree provided it has an adequate hollow; do you remain of that view or have you departed from that view?---I've just told you I said no.

5 Any tree though, any species that means?---Any species? I didn't - was that the thrust of your question because - - -

Or do you say they only breed in eucalypts?---To my knowledge they only breed in eucalypts, I haven't got experience of them having bred in any other
10 tree, but they do breed in eucalypts and they breed in a range of eucalypts. And what I mean is they are not species specific as far as breeding. They will breed in any tree species, but I don't know about hollows, they won't necessarily breed in any hollow.

15 Then you said:

*It is possible with careful planning to minimise the effect of Forestry activities on its habitat and it should be possible to provide a future for both the bird and the industry at the same time with an awareness and a
20 sensible, sensitive approach.*

You remain of that view, don't you?---Yes, I do.

25 Thank you. And then you made some recommendations didn't you, at the bottom of that page:

*The following recommendations are made to ensure a continuing supply of flowering eucalypts globulus which will be available for the swift parrot and future management recommendations are also
30 suggested to protect the breeding habitat.*

The first recommendation is to minimise clearance of that particular species on the Eastern Tiers below 300 metres especially on creek sites; correct?---Yes.

35 So you would like to see it maintained around the creeks because the birds like to be close to water; correct?---Not particularly because the birds like to be close to water, but eucalyptus globulus tend to grow on creek sites - - -

40 And grow better there?--- - - - and provide - yes, provide potentially a huge feeding resource.

Ensure that in the planning stages for successional clearance that in each linear five kilometre block of the tiers which contain that species at least 30 per cent of the species remains unlogged.

45 Do you maintain that view?---I would like to see it extended to maintain all eucalyptus globulus.

When did you change your view from 30 per cent to all?---Over a period of time I suppose. I mean remember this was produced after one year. Since then we have had an awful lot of dealings and I have had an awful lot of dealings with Forestry Tasmania, I have had an awful lot of dealings with the Forest Practices Board in relation to these prescriptions and I'm now very strongly of the view that any area which is - where there is suitable feeding habitat should be maintained and any area where it is known there is good - there is breeding habitat and habitat which is used by them for breeding should be maintained.

5
10 You provided a significant amount of information to the Forest Practices Board about the habitat of the swift parrot didn't you?---Yes, I did.

And you made a significant number of recommendations to the Forest Practices Board about what you perceive to be the appropriate requirements so that logging can take place near known habitat of that parrot, and the - - -?---I think I have over the years, yes.

15
20 And in general terms the Forest Practices Board has accepted your recommendations hasn't it?---It has, yes.

And they are what we see in the prescriptions today, aren't they?---Well, they are not necessarily mine.

25 But you were party to those recommendations?---I was party, but I wasn't the person who was actually doing the work and dealing with them. Far more research has been done on the swift parrot since my days.

30 Yes, but you don't disagree with the proposition that a lot of your work is the basis of the current prescriptions?---It's based on a good deal of the work that I've done, yes. That's been a good starting point, I will accept that, but it's been considerably refined since my day.

35 Your view really at the end of the day now is that in an ideal world there should be no logging at all?---No, it isn't. No, it isn't and I take objection to that comment. My recommendations if you read them carefully is that there would be a moratorium put in place and a proper effort is made to determine - sorry, your Honour - - -

40 HIS HONOUR: That is all right?---A proper effort is made to determine where exactly this swift parrot does breed. What it uses; it doesn't necessarily use them in every year, but it uses them in some years and obviously they are important to them if they are used in some years. That we make a proper effort and that is done over a number of years. Then at the end of that time - and I can't tell you what time it would be - that one can make some very serious -
45 very serious - not claims - but know quite clearly which areas the parrot uses and which areas it doesn't use. And I'm saying that those areas where the parrot does use should be retained and maintained in toto and those areas it doesn't use as far as the swift parrot is concerned I don't have a problem as far as Forestry is concerned.

MR D. GUNSON: If basically we accept your logic you would never log anywhere within 10 kilometres of the coast?---That's not true. That's not what I said.

5

Well, it is true. It is what you did say?---No, it isn't what I said. I said there are areas which may not be used by the parrot, which could be logged. I'm not saying that every area - in your cross-examine you've given the impression that the birds use all of those areas all of the time. There are large areas in between Oyster Bay and Kettering, and down to Southport and Dover, and they may never be used by parrots, in which case I don't have a problem. And the same in some other areas, so it isn't what I was saying.

15

Basically wherever globulus grows you expect to find the parrots if the tree is flowering?---They could find them, yes, but it doesn't mean to say that all the land immediately to the hinterland should be set aside. I don't say that at all. The nesting may be in a very discreet area. I was looking at that map earlier, and it showed that there were three groups of nests in those areas, and there were large areas where there were no nests at all recorded. That may be something to do with the fact that no surveys had taken there, or whatever. I don't know the background to that. But I am sure that swift parrots regularly use certain areas. It may not be for two or three years in between, but they do use the same areas that they used before, and I think my - some of the work I did originally, where there were birds nesting at Roberts Hill, and there were birds nesting at Summerleas, they've actually nested in those areas again since then. They weren't nesting in the year immediately behind them, immediately following my work, so they will use the same area again. But I submit that there are other areas in between which are probably never used, but I think we need to find that out.

20

But they went back for instance to the Mount Wellington slopes after the bush fires, didn't they? I mean, the whole of those slopes were completely burnt out. They returned to that environment, that very hostile environment?---Well, why do you call it hostile?

35

Once it has been burnt out it is going to be very difficult for growth to start again. It is barren, it is open, it is bare?---Yes. Well, it's only hostile for a short period of time. They aren't killed automatically. I mean, those - many of those trees were killed, and you saw that in the photograph, but after a fire has been through an area eucalypts are quite capable of withstanding fire, by and large.

40

Well, let us return to your recommendations. You said then:

45

In areas where globulus has been logged, leave several trees uncut, especially if over mature, as this will provide immediate feeding and breeding habitat. Recommended five to large 10 to medium trees per hectare.

That was your recommendation wasn't it?---Sorry. Whereabouts was that?

Just up on the bottom of page 99, second last sentence. Do you have that?---Yes. Globulus.

5 Well, that is a form of selective logging, isn't it?---It is. And - - -

What is your understanding of the - - -?---And I think - again, I put this in my affidavit. Feeding habitat is very different to nesting and breeding habitat. Isolated trees may, in years to come will form huge crowns, and a huge amount
10 of potential feeding resource. They will flower prolifically, and as a consequence there is an enormous amount of feed.

Which is precisely what Forestry Tasmania is doing in its plantations where it selectively logs, isn't it? It is leaving, as you saw the other day, the large trees,
15 the C trees?---But that's not - that's not breeding habitat. I'm talking about foraging habitat. And the foraging habitat are generally closer to the coast. When I'm talking about breeding habitat, those trees which are left, and, as I think I said before, I consider won't be useful as breeding trees for within 100
20 years, maybe more.

But if the birds don't find breeding trees in one area over a few hectares they will move on somewhere else, won't they?---Why do you say that?

25 Well, logically?---No. I don't believe it's - - -

They're going to have to find a nest somewhere?---Well, they - or they don't breed at all.

30 See - - -?---We don't know that. We don't know. You're assuming that, but we don't know that.

You also suggested regeneration of ridge top timber, especially if it is adjacent to areas of globulus forest. Do you maintain that recommendation?---Yes.
35 Yes.

And you said, on the next page - - -?---And I think you may see an example of that when you go to Bruny Island.

40 On the next page you continue that proposition by saying:

Often this forest will be composed largely of globulus from poor ridge top soils, and other peppermints may dominate. These ridge top trees are often wind and fire pruned, and readily form hollows, and as such are most important for hole nesting birds.

45 And you maintain that recommendation?---Yes.

And the other day up in the Wielangta you saw precisely that, didn't you, ridge lines maintained?---Yes. Ridge lines maintained area terrific potential habitat. I

5 don't know whether - the problem is that some of those areas which were logged may well have also been - they may have been better habitat for the birds than those ridge tops. I don't know that. And until we - I think we can easily do this. We can easily determine where the birds - where the important areas are for the birds. I don't think it's a particularly difficult task and I don't think it's a particularly expensive task. All it does is require a bit of time and a bit of just holding off.

10 You have been to the Wielangta obviously, you were there earlier this week with us weren't you, on the view?---I was, yes.

Now, have you had the opportunity to look at the affidavit that has been filed in this matter by Luke Ellis?---No, I haven't.

15 Could the witness be shown Mr Ellis' affidavit which is page 780 of Book 2, I think - Book 3.

20 Now, I wonder if I could take you please to paragraph 20 of his affidavit, page 787 and you will see there the heading Statistics of the Wielangta Forest Block. And you will see that Mr Ellis says he has a table which we will go to on the next page in a moment, it shows the land uses for the Wielangta Forest block. Table 1 is derived from his analysis of Forestry Tasmania's GIS and he said he has used the following layers which indicate spatial accuracy and he goes down to deal with those. Now, if you look at the next page you will see a table there, do you see it, table 1?---Yes, I do.

25 And at the bottom we have the total Wielangta block comprising 37,650 hectares; do you see that?---Yes.

30 That, even you would agree I suspect is a significant area?---It is indeed.

Indeed, isn't it?---Yes.

35 And if we go down through that table you will see that it comprises formal reserves and informal reserves which totals some 20 per cent; do you have that?---Mm.

A private reserve of 2 per cent?---Mm.

40 A State forest that is couped is 10 per cent?---Yes.

Other public land is 2 per cent. Private land is 33 per cent?---Yes.

45 And total native forest is 67 per cent?---Yes.

Now, as you will see from those figures only 10 per cent of that forest is to be couped and you would agree that is a very small amount?---Comparatively small, yes.

Does that surprise you when you consider the whole of the Wielangta block?---Not really, no. In immediate coupes - no, I don't think it does surprise me. But 3900 hectares is a lot of land.

5 Yes, it is 10 per cent of 37,650 roughly?---It is. But it also contains a lot of breeding swift parrots.

And so does 37,650 doesn't it?---Do we know that? Well, okay - - -

10 Well, there is a substantial amount of forest there isn't there?---It follows if I say that 3900 contains several - contains substantial, so does 25,000 yes.

You have got total native forest of 25,120 hectares haven't you, 67 per cent?---Yes.

15 Now, what we are talking about with the coupling is 10 per cent only aren't we?---That's what appears there, yes.

20 Have you seen these figures before?---I don't think I have, I may have done, but I've certainly seen the figure of the formal and informal reserves and I've seen the private land figure.

But there is also a very substantial amount of forest isn't there?---There is indeed.

25 And a lot of it will not be logged will it?---That's true.

30 And what will be left will be selected forest areas won't they, selected harvest areas leaving a significant number of trees, leaving the wildlife habitat strips and leaving the wildlife habitat clumps and the skyline reservations?---You mean what will be left following harvesting?

Yes?---Yes.

35 You accept all of that?---Yes, I do.

You don't completely rule out the possibility of parrots nesting in the skyline reserves do you?---No.

40 Because, as you said in your report, it is the skyline reserves that take the brunt of the wind and so forth and tearing off the branches creates hollows. Correct?---Yes.

45 So skyline reserves are beneficial to the parrots, aren't they?---Theoretically yes but I don't know about in practice. I keep coming back to my point that the areas which are coupes we actually know are used by parrots. We don't know whether they are capable of moving elsewhere and bearing in mind in this we are dealing with a species which is classified as endangered.

The parrots, were they in Wielangta last summer?---I don't know.

Were they in Wielangta the summer before?---I don't know.

5 The year before that?---Well, I know they were there in 2001. I can - - -

So from 2001 you don't know what the position is over the intervening years?---I don't know. No.

10 And of course you are not going to say they will be there next year, are you?---No.

Or the year after that?---No.

15 Or the year after that?---Well, I think it is probably a good likelihood they might be there one of the years after that.

The plain fact is at the end of the day they are a migratory bird who make their own mind up where they are going to go depending on the factors that influence them and one of those major factors obviously is the food?---Absolutely.

20 And it all depends whether there is going to be food. And even when there is a lot of food with all of the gums flowering it doesn't necessarily follow that they will be in Wielangta, does it?---No, it doesn't, no. Absolutely not.

25 That is right. When there is a lot of food about they may be perfectly happy somewhere else, down at Summerleas for instance or up at St Helens?---If there is a lot of food in Wielangta I would bet my boots they would be in Wielangta. If there was a lot of food on the coast I would bet my boots they would be in

30 Wielangta. I don't believe - no, I can't really say that but it is probably that Summerleas birds wouldn't move that far away. I think they would find a feeding resource nearer.

35 They obviously have to compete for nest hollows with other species, don't they?---With some other species, yes.

Every hollow does not necessarily become a swift parrot refuge or nest, does it?---That's right.

40 And they are fairly specific about the size of the hollow that they will use? They don't want it to be too big, do they?---That's absolutely right. Absolutely correct, yes.

45 Because it can open up the nest to predators?---Yes.

Possoms are predators of eggs and chicks?---I am not sure about that. They may well take eggs. I am not sure - it is possible but I don't know of the evidence of that.

Young devils can climb and they will predate them?---Doubtful.

Do they climb?---Young devils can climb.

5 Yes?---But I don't think they can - I don't consider that a major problem. I don't consider it a problem at all to be quite frank.

Feral cats can climb?---Feral cats can, yes.

10 And they predate them?---They could do, yes.

Owls will take the young?---Yes.

15 And I hate to mention but kookaburras will also take the young as well, won't they?---Yes.

Yes. And will take the eggs?---If they can get to them, yes.

20 So there are a lot of predators who look for the swift parrot either as an egg or as a fledgling?---And that's the main reason they choose a very small hollow.

25 That is right. And they also have to compete for that hollow with other birds, don't they. Starlings will live in them?---Yes. It is quite interesting we didn't - I see any starlings on our field trip the other day. I was expecting to see a number of starlings. We didn't see any but they potentially are competitors and of course when a starling occupies a hollow it fills it with straw and would never be used by a parrot thereafter.

30 And starlings normally nest in flocks, don't they? We rarely get an individual starling. They normally - - -?---Very, very loose flocks.

35 Yes. So if we have starlings in the forest using these hollows you are likely to find quite a lot of starlings belonging to the one loose flock?---I don't think that is necessarily a foregone conclusion. I think they possibly will. They tend to flock very substantially post breeding but when they are breeding they tend to operate more as pairs and I think they do operate as very loose flocks but you might only have one pair breeding in one bit of forest but on the other hand you might have a large number of them, sure.

40 And other competitors for nest sites are other parrots?---Yes.

45 How many? What sort?---The blue-wing parrot would certainly, the green rosella, musk lorikeet if they are in the same area. That would be about it. That would be about it and the other ones are the - the cockatoos are much larger.

They also compete for the nesting holes?---No. No, because they prefer much larger holes.

Right. And of course the other creatures that will use hollows are possums?---Yes. Possums use - they've got to be - the hollow has got to be large enough at the entrance for the possum to get in.

5 Sugar gliders?---Yes.

What else?---Oh, pygmy possums. I can't really think off hand of other birds, but there aren't - - -

10 So for every hole in a tree or hollow in a tree - - -?---There are a number of competitors. That's for sure.

- - - there is a large number of competitors, aren't there?---That's for sure. Yes. Well, no, there's not an enormous number of competitors, but there are competitors.

15

A reasonable number?---Yes.

Particularly avian competitors?---Yes.

20

Yes.

HIS HONOUR: I am glad you didn't mention fox.

25 MR D. GUNSON: No, no. I think they would need a ladder, your Honour.

MR O'BRYAN: Try the magpie.

MR D. GUNSON: The magpie.

30

MR BROADFOOT: Flying fox.

MR D. GUNSON: We don't have flying foxes here, Mr Broadfoot. Sorry, just a small education program down here, your Honour?---Well, some people think sugar glides are flying foxes.

35

Yes. People from the mainland, Mr Brown. Anyway, there is a large degree of competition, isn't there? And the plain fact is, as you have said earlier, that for many years the parrots may not use the nest site and will come back to it for whatever compels them in any one particular year?---I believe so, yes. Having said that, I'm not absolutely certain, but I know they will use the same area. They will use the same bit of forest, if you like, but whether they use the exact same nest site, that I could not say for certain.

40

45 Loss of habitat is not the major problem that faces the swift parrot, is it?---Yes, it is.

I suggest to you it is not. I suggest to you that many of the issues that you have identified in your affidavit are responsible mainly for the loss of the parrot. The fact that they fly so fast and end up hitting buildings is a factor, is it not?---Yes.

5 You have identified the issue of them rising suddenly from the side of the road, and flying into vehicles. That is an issue?---No, they don't actually rise - I should elaborate on that. They don't actually rise. They're actually in a tree, and when they take off they go like that.

10 Swoop down - - -?---Yes. And it's - - -

- - - and that is the end of them if a truck is going past?---That's right.

That is a danger for them?---Yes.

15

Chain link fences are a danger, as you described?---Yes.

Windows are a major problem?---Yes.

20 You said:

Flying around suburbia is dangerous for them, because they fly low and fast.

25 And many of them are killed by vehicles, aren't they?---A number are killed by vehicles.

Yes. And what other factors enter into this?---Are you asking me that question?

30

Yes?---Birds of prey.

Yes?---Possibly lack of food. They're fairly vulnerable because they're a very mobile species. I'd say birds of prey are probably the main predators, the principal predator.

35

And their major predators in Tasmania - - -?---I could mention wind farms, but perhaps we ought to leave that one out of this.

40 That is a factor perhaps on the west coast?---Well, they do spend a lot of time on the west coast.

In any event, that is probably academic as this stage. There is only one wind farm at the moment. But they are at risk though, substantial risk of other birds, as you have already properly mentioned, the goshawk?---Yes.

45

Peregrine falcon?---Yes.

The swamp hawk?---No. I doubt it, because I don't think the swamp hawk is fast enough to catch. They tend to do for things like frogs, and things on the ground more, the swamp hawk.

5 Right. What about other birds? What other species of birds will attack them?---Well, as you suggested before, kookaburras.

Yes?---I can't think of any others off the top of my head, but I know that peregrine falcons, they have been found in the work Nick Mooney's done and he
10 has found swift parrot body parts and feathers in a large number of the nests that he's located.

Eagle nests, yes?---Not eagle nests, no, in peregrine falcon nests.

15 Thank you. Now, you say in paragraph 13 of your affidavit - there is no need to turn to it at the moment - that you believe the swift parrot mortality must be particularly high for these natural events and you suggest - that is going to be a continuing factor obviously, isn't it?

20 HIS HONOUR: Sorry, paragraph 13 of the report?

MR D. GUNSON: No, of his report, your Honour, just bear with me.

HIS HONOUR: 467?
25

MR D. GUNSON: Debbie just read it to you. Half-way through 467 you say this:

30 *Death and injury is caused through collisions with man-made structures is of great concern to the long-term security of the species. The swift parrot is an extremely fast flying bird. It flies in a generally direct line at high speed between perches. It seems to have the ability to be able to fly and speed through forests under the canopy avoiding branches without difficulty but it appears incapable of avoiding certain*
35 *man-made structures, in particular high wire and chain link fences and also glass windows where it can see bush or forest beyond.*

Now, you don't depart from that I assume?---No.

40 Another problem associated with this is that swift parrots are attracted to urban environments. You maintain that?---Yes.

They have even been recorded in the heart of the city in Hobart, haven't they?---I have seen them in the car park at K and D feeding on trees.

45 Which is a store a few hundred metres up in Murray Street?---It's a very large store in the middle of the car park.

Yes. And they have got some flowering trees in the car park there. What sort are they?---They're West Australian eucalyptus ficifolia, they're the pink gums.

And you continue:

5

I cannot say that they chose urban environments by preference but when eucalypts are flowering abundantly in towns swift parrots will regularly be seen there. The problem arises with these urban-living parrots being vulnerable to death or debilitating injury through collision with windows and fences. It is difficult to quantify the extent of death this way but during the time of my survey 14 deaths or injuries were reported to the Parks and Wildlife Service. I personally know of a house with opposite windows creating a visual tunnel to birds being responsible for seven swift parrot deaths in one year.

10

15

Then you go on to describe the road-side killing that you saw. You say in the next paragraph:

20

In view of the fact there must be very substantial general bird mortality in the wild and very few are reported to the Parks and Wildlife Service I believe the swift parrot mortality must be particularly high. It is possible that some hundreds could be killed annually.

25

And you maintain that?---Yes, I stated that not very long ago.

But you maintain that view?---Yes, I do.

30

And when you say some hundreds what are we talking two, three, four hundred?---Well, no, probably between 100 and 200 I would suggest.

We really don't know, do we?---No.

And you say this:

35

Bearing the fact that such mortality occurs it is particularly important that prime habitats where human intrusion is minimal are provided maximum protection and preserve from increased human developments which may be hazardous to the species.

40

That is all very well but while there are flowering trees within the urban environment the parrots are going to come, aren't they?---Yes.

45

And there is no way you can stop that short of removing flowering gums from the urban environment and that is not going to get very far, is it?---Well, it's not going to make it very popular in some areas.

But it is not going to happen, is it, short of legislation saying you are not allowed to have them?---No, that's fair comment, but there could be rules to stop people planting blue gums. Blue gums are terrific attractions to them.

Yes, but while there aren't such rules the parrots are going to continue to come to the urban environment, aren't they?---Mm.

5 And that urban environment extends throughout the State?---Well, that's the whole thrust of my argument, is that Wielangta is one of the least urban environments.

10 No-one would argue about that but the point surely must be that only a very few birds are going to be attracted to Wielangta during the flowering-gum season and you really don't know what population turns up at Wielangta, do you, in that little area of forest block as opposed to the whole of the Wielangta area that you have described?---Yes, my thrust is a general one in that area which includes forestry and I accept that there are very substantial reserves in
15 that area and I maintain that if we're going to look at the long-term conservation of the species, I don't talk about - I don't say recovery, but long-term maintenance of the population, our best chance of reducing any problems with the species is maintaining those high quality areas - high quality habitats in as
20 pristine a state as possible.

And - go on, please?--- - - - in the knowledge that we are going to continue to get this mortality in the urban environment and more and more people are building more and more houses which are made of more and more glass and it's
25 of an ongoing concern to me on that basis.

Your major concern is that the use of glass in building, in modern building particularly is going to cause the death of these parrots if they are in the area? I understand the logic of that?---Yes, it has the potential to do that. I am not saying every - you know, we have this unfortunate situation where swift parrots
30 for one reason or another are attracted to the urban environment, be it at the start of the season, be it at the breeding season, but the fact is that they are and the fact is that we are building more and more and more and we are going further and further up the hills into the - into, you know, what is potentially good breeding habitat and we're building larger and larger houses made out of
35 more and more glass and we've got tennis courts, as we're an affluent society so we have all the trappings of affluence. And that is an increasing threat to the swift parrot rather than a decreasing threat, that's the way I interpret it.

40 And probably a greater threat than removing some habitat at Wielangta?---Well, if you combine the two together then you are just doing nothing to assist the bird, that's what I'm saying.

If you remove habitat at Wielangta you are not directly causing its death are you? Whereas a house - correct?---No, unless you are chopping the tree down
45 in the middle of the breeding season.

Assume you are not chopping the tree down when the bird is breeding. By removing trees at Wielangta you are not contributing to its death are you?---Are you talking about the death of an individual bird or the death of the species?

I am talking about the death of individual birds?---No, but I'm talking about the death of a species which is - - -

5 I am talking about the death of individual birds. By removing some trees at Wielangta you are not going to cause the birds to die are you?---I agree with that.

10 However, if you build large houses made of glass there is a possibility that birds will fly into that glass and die?---Indeed.

15 By putting up tennis courts in areas where the birds live or breed or feed and because of their low flying tactics there is a possibility of causing death; correct?---Yes.

And if you plants lots of flowering gums in areas where there are lots of traffic, again that is going to contribute towards their death?---Potentially, yes.

20 So they are the things that really are more dangerous for the birds than the removal of trees; that is a fact isn't it?---I don't actually agree with that point.

25 It has to be logically so. If you put up a big piece of glass and birds fly into, they die don't they?---Yes, if they die, that is one thing, but if you are removing their habitat which they are using you are forcing them to go elsewhere. You don't know, I don't know whether that habitat which they're forced to go elsewhere to is going to suit them and there is a possibility that they will take it up, I don't disagree with that.

30 If we go back to your figures in 1989 - - -

HIS HONOUR: We might go back to those figures on Monday afternoon.

MR D. GUNSON: Certainly, your Honour.

35 HIS HONOUR: Does anyone need to say anything further about arrangements on Monday morning or are they all clear? And my associate will receive an email, so when I see him at 6.30 on Monday morning he will know what the latest is.

40 MS MORTIMER: I am sure he is thrilled, your Honour.

HIS HONOUR: Yes, I wish everyone a good weekend and we will adjourn.

45 MS MORTIMER: Your Honour, there is another matter and I am reminded and it has not got to do with parrots, it has got to do with beetles. Your Honour, we have filed and served a notice to produce on the respondent in relation to Mr Meggs' field notes and call on that notice. It was filed and served yesterday and I would be grateful for an indication from my learned friend now when it is going to be complied with.

MR D. GUNSON: Well, Forestry Tasmania, as I understand the position does not have Mr Meggs' field notes and the notice has been served on the respondent.

5

MS MORTIMER: Can I inquire of my learned friend whether they have communicated with Mr Meggs and asked him to bring them with him?

MR D. GUNSON: Well, Mr Meggs is in Australia I am told and this notice was not given before the commencement of the trial and before he left from Canada. I have a conference with Mr Meggs on Sunday, I will see what I can do, your Honour. That is the best we can do. The notes - - -

HIS HONOUR: I really have to adjourn otherwise my staff will not get back home let alone come back at 6.30 in the morning.

15

MATTER ADJOURNED at 3.44 pm UNTIL MONDAY, 12 DECEMBER 2005

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NONE REQUESTED