

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Ecosystem Decline in Victoria

Melbourne—Wednesday, 21 April 2021

MEMBERS

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Mr Clifford Hayes—Deputy Chair

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Ms Melina Bath

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WITNESS

Dr Barbara Wilson, Adjunct Associate Professor in Ecology, School of Life and Environmental Sciences, Deakin University (*via videoconference*).

The CHAIR: I declare open the Legislative Council Environment and Planning Committee public hearing for the Inquiry into Ecosystem Decline in Victoria. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the traditional custodians of the various lands which each of us are gathered on today and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee or who are watching the broadcast of these proceedings.

I would also like to welcome any members of the public who may be watching these proceedings via the live broadcast.

At this opportunity I will just take the time to introduce you to committee members. I am Sonja Terpstra; I am the Chair of the Environment and Planning Committee. Attending with us via Zoom are Ms Nina Taylor and Mr Stuart Grimley. Back in the room we have Mr Andy Meddick and Ms Melina Bath, and other members of the committee may join us at other times throughout the hearing as well.

The evidence that you give today is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during the hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website. So if you could just, for the Hansard record, state your name and the organisation that you are appearing on behalf of, please.

Dr WILSON: My name is Barbara Wilson, and I am from Deakin University.

The CHAIR: Great. Thank you very much. And with that, could I invite you to make your opening comments, and if you could please just keep them to about 5 minutes, that allows committee members then to ask you questions. So with that, I will hand over to you.

Visual presentation.

Dr WILSON: I am going to talk to you about decline in heathy woodlands in the Eastern Otways. I have decided to concentrate on some of my expertise, which is mammals and vegetation habitat, and then talk to you a little bit about restoration. I would like to acknowledge all of the research students and colleagues and support that I had for the research.

So the area that I am talking to you about, the Eastern Otways, the Anglesea Heath, was up until 2015 part of the lease for the Alcoa coalmine, and it is now incorporated in the Great Otway National Park—very diverse vegetation dominated by heathy woodlands, lowland forest and quite strong spiritual connections between past, present and future generations of the Wadawurrung. The significant mammal community that occurs in this area—there are about 29 mammal species, and of major concern is the threatened species, and they range from little Dasyuridae marsupials called the swamp antechinus, to medium-sized mammals called bandicoots and even some native rodents—this one is called the New Holland mouse.

My mammal research started in the 1970s and has continued until just recently. It is one of the few long-term studies of assemblages in mesic terrestrial Australia. The focus initially was on the swamp antechinus and New Holland mouse, because they were species of interest. We did not know how they functioned, what their ecology was and things like that. The area was impacted in 1983 severely by the Ash Wednesday fire, but it did start to regenerate, and I studied the recolonisation of the mammals and the vegetation.

In summary, over the first three decades the mammal communities were doing quite well. The New Holland mouse was found in 17 sites. We knew about its habitat, where it occurred, and we knew what the populations symbols were like. These white one signify some of the areas they occurred in. The swamp antechinus was doing okay; we knew it from 30 sites. Other species had high site occupancy—I have not put the colours in—but they were at most sites, 61 per cent of the sites for some of those species, and up to 80 per cent, 70 per cent.

I returned to some of this study area in 2013 with a view to reviewing what was happening in the area, and I was alarmed. The New Holland mouse: we have had no new captures for that species since 2002. The swamp antechinus: only eight individuals during that period and none were captured in 2016. The woodlands, the low forest, the sandy heathlands and the headland scrubs all had very low mammal abundance, something I was not expecting, and 67 per cent of the sites had severe declines, and they were previously very rich. However, we did have one optimistic outcome. The coastal dunes and some of the gullies in this area had high abundance of mammal species and species richness, including the endangered swamp antechinus. So this led us to deduce or propose that at least we have some mammal refuges in this vegetation, and that is probably due to the high vegetation cover, moisture and probably nutrients.

So what are the characteristics of these refuges? Well, as I said, they have the high cover and some of them occur, if you know this area, in small coastal dunes between the Great Ocean Road and the ocean. They are optimal for some of the threatened species, even in the presence of our predators—cats and foxes. So they are offering some kind of resemblance of refuge for our mammal communities.

What are the factors that we think have contributed to the mammal declines? In green we have got the factors that we know. We have studied. We have scientific evidence. We have good statistics that climate change, declining rainfall, declining habitat and predation post fire have all contributed to the declines in the mammals. It is likely that the habitat fragmentation and increased fire have also contributed—and they all probably interact, these factors.

Now, one of the things I have mentioned is an impact on vegetation, and that is the impact of *Phytophthora cinnamomi* or phytophthora dieback, which is an EPBCA-listed threatening process. What it does: it transforms healthy vegetation into diseased vegetation, with a loss of a lot of the vegetation species—important species—particularly a loss of things like grass trees, and it becomes a very species-poor vegetation community.

This is just showing one of those long-term studies, where we looked at the disease over a 26-year period. The white is non-diseased, the red is diseased and the yellow is post disease. These are the only areas that were uninfected after a 26-year period. The pathogen passed right through that area. It had huge impacts not only on the vegetation; it took out grass trees—some of these grass trees are over 150 years old. It also had huge impacts on the species. So we do studies on the mammal species there. We have recorded declines in the mammals, the species, their abundance. We knew from radio tracking some of these little animals that the grass trees were extremely important for nest trees. They are our old-growth equivalent to forest communities.

So I have thought a lot about how we can restore these habitats and the mammals. I think when we are working with our colleagues in DELWP and Parks to identify the location of the refuges across the landscape, it is something that we are needing to do across Australia—even in the national parks and supporting all our communities. We have to protect those refuges from fire, and we are working with Forest Fire Management Victoria to try and employ those actions. We have also thought about artificial refuges. Our students have built these artificial refuges so that the animals can move into them after a fire, and we are finding that we get some really good results there.

I think we need to think about burning if rainfall is low to avoid extinctions. A lot of these species are going to need captive breeding and reintroduction strategies. We certainly need effective management of phytophthora and are working with the CMA and also with DELWP to try and improve that management.

Lastly—and I think it has been mentioned in many of the presentations—monitor, evaluate, report and audit. Unless we were present by chance in this system and we were pursuing research objectives, not to monitor declines but to see how the system worked—if we were not there—we would not have these long-term datasets. I certainly would encourage the development of strong monitoring in all of our ecosystems. So I think I will leave it there. I am happy to answer questions from the committee.

The CHAIR: Great. Thank you very much for that presentation. Mr Meddick.

Mr MEDDICK: Thank you, Chair, and thank you, Dr Wilson, for your work in an area that is right next to where I live. I live in Torquay, so I know much of the area that you are talking about there and even into the Otways. I have just got a couple of quick questions. First of all, around the phytophthora, you mentioned as one of the solutions quarantining uninfected areas. I am just wondering what that looks like. How do we do that to contain that spread? I would like to know what work is actually being undertaken right now in the Otways to contain that too. I am just wondering also with the smaller mammals is pressure from development all along the Surf Coast also something that is contributing to the decline of these species in those areas, and would protections from a distinctive area landscape declaration be helpful in that regard?

Dr WILSON: Thank you very much. I will answer the questions from phytophthora management first. I have worked in Western Australia and Victoria on phytophthora management on the national threat abatement plan implementation committee, which has some wonderful strategies. Western Australia has developed very good high-level strategies mainly because they have had cooperation between government and industry. Actually, Alcoa has developed many of the management strategies. One of the containment strategies that has been developed nationally is to contain spread from particular areas. Now, cost benefit is the problem here, and we need to do cost and the benefit of maintaining our biodiversity. So we are currently implementing a management plan through the CMA where we are identifying high-level biodiversity areas in the Otways and are then going to concentrate our efforts on containing phytophthora in those. So you get a benefit for the cost of containment.

Containment can mean anything from removing people from the area—that is, isolating the area—to using techniques whereby people who are bike riding or walking into the area are washing down all of their bikes and their boots et cetera and so not moving the phytophthora around the landscape. We also have a spray called phosphite which we can hand apply or aerial spray. We have used it in Western Australia very strategically—but very good outcomes, especially in the high-biodiversity areas in south-western Australia down around the Albany area. They have been able to save a lot of their endangered species by applying this treatment. Phosphite does not cure the spread of phytophthora; it stops the pathogen moving into the plant and killing it, so it is like a holding mechanism. So we have got a long way before we actually have a cure for this pathogen, like many other pathogens. So yes, we can have controls on people entering areas. One of the ways that we really need to address the threat of the pathogen is by vehicles. That includes all of our government departments knowing how to spray down their vehicles, what to do in the case of fire and what to do in the case of fuel reduction burning—very good health protocols, and we are working with them on that.

So moving on to your mammal question, if that is okay. Fragmentation—yes, fragmentation is a component of the decline, but the actual areas that I looked at were not severely impacted by fragmentation. Certainly along the coast [Zoom dropout] fragmentation did contribute to the decline of one of those species, but inland most of this area was undeveloped and is in national park now, so it is not the fragmentation but it is the other impacts that have probably got a higher level of impact for these mammals.

I think, Andy, you asked about identifying strategic areas. Yes, it can help, and that is what we are doing even with the phytophthora work. If you can identify where your biodiversity values are, then you can concentrate your costs on trying to control all kinds of processes like phytophthora and predators and things like that.

Mr MEDDICK: Fantastic. Thanks so much. Thank you, Chair.

The CHAIR: Thank you. Ms Taylor.

Ms TAYLOR: Thank you for your submission and contribution today and all the good work you do. Look, I was just interested to understand a bit more about how traditional owners are involved in the management of the eastern Otway Ranges and the Anglesea woodlands as well.

Dr WILSON: Yes, that is a very good question. For many years I always had an inquiring mind as to what the traditional owners thought and knew about the area that I worked in, and for many years there was no connection with traditional owners. I mean, I was working in teaching at Deakin University and we had traditional people learning there, but there was no connection between what I was doing and what they were doing. I am pleased to say that in the last 10 years things have been definitely changing. I have been really privileged to actually work with DELWP recently on, baby steps, working with Wadawurrung on country on actually the first steps to monitoring what happens when you burn—so taking them out on country, learning our methods and talking to them about theirs in preparation for, down the track, forest fire management. The Victorian government have policies for implementing traditional burning, but it is baby steps. In some areas in

Victoria they are already involved, but yes, it was only last year. Even though COVID was on we were able to in certain breaks take people out. It was a very thrilling experience actually, and I think they enjoyed it too. And I am sure that that program will develop out much more, and that will give us the ability to discuss with them more about what these animals might mean to them, because a lot of them have lost that connection. But at least we can talk to them in general terms about how they might be important, how they might have been a totem for their ancestors and things like that. So thanks for that question.

Ms TAYLOR: Great. Thank you.

The CHAIR: Mr Hayes.

Mr HAYES: Thank you. Thanks very much, Dr Wilson. I just want to ask a couple of questions that have sort of been asked before just to enlarge on them if you could. One is about the origins of the phytophthora infection—where it came from and how it sort of spread through your area—and the other one is if you could touch on what you talked about with the connection with the Wadawurrung. What do you see as their involvement, hopefully, in the future? Probably you have not got very far with it yet, but what would you like to see out of closer involvement by the Wadawurrung and their management of your areas?

Dr WILSON: Yes. Well, firstly *Phytophthora cinnamomi* was introduced to Australia, so it is a non-native pathogen, and we concentrated mainly on that species, but over the last 20 years we have realised there are hundreds of different species of phytophthora. However, the management of the pathogen and those other species is pretty similar: you have got to stop the spread, control people moving in and out, control vehicles and things like that. The history of it is that it was brought in on timber, probably to Western Australia first, and I know that in my area there was kind of limited evidence of the presence of it in the 1970s in the eastern Otways. It could have been brought in with vehicles. There were even pine plantations in the area back in the day, in the 20s and 50s. It could have been that or it could have been on other vehicles. So that is the way, and now it is right through Australia—it is in the tropics, it is in Tasmania, it is in New South Wales—and we are all trying to improve our management. There are some really excellent examples of management round Australia, but I think we have got to step up to the mark here in Victoria.

With the Wadawurrung, I definitely think that Forest Fire Management and the Victorian government have really taken some big steps to incorporating traditional owners in the management of their country, and I do believe that in the Otways there will be some further outcomes in the near future. I think on-land fire management is something that they really connect with. Even if they have lost that ability, actually learning about it, so training the skill, upskills them. Lots of young people can contribute to that, and I think that makes them feel much more connected to country, and they can share that with their families. I hope that as well as the fire—the burning is management of the ecosystem—will contribute to management of endangered species down the track.

Mr HAYES: Thank you.

The CHAIR: Ms Bath.

Ms BATH: Thank you. Thank you very much for your presentation. This is a really interesting topic, something I have been interested in for a number of years in terms of Indigenous cool firestick burns. The beauty is that Indigenous people can connect with country and culture and heritage, but also we can put science behind it to show increasing biodiversity and an increase in better outcomes. There is a lady by the name of the Dr Peta-Marie Standley from the Indigenous firestick network, and she has been working up in northern parts of Australia doing this work as well. I guess my question is: what is some of the important science that you think we need to be measuring? So after an Indigenous burn, a cool burn, at the right time of year with the right factors, indicators, share with the committee some of the things you would like to be seen in that scientific rigour.

Dr WILSON: Yes. Well, even the groups that we took out recently with Forest Fire Management, part of their MER program—monitoring and evaluation and reporting—on prescribed burning in fire management, we even shared with the Wadawurrung what the techniques are for measuring those. So the first steps, the baby steps, were measuring what the vegetation is floristically—that is, what plant species are there. That is important so you make sure that there is food for birds or for our mammals that I work on.

Secondly, structure is a very major and important aspect of the habitat and, as I mentioned, in those refuges very thick and well-covered vegetation can actually protect animals against predators. We are finding that out.

Even though the predators are there, it disturbs their search image and they cannot kill animals as well. That is what we are finding out. So Indigenous people are quite interested in it. In fact they are very good—the people that we were working with were very good on identifying plant species—and then we were showing them how to measure the vegetation structure. The main thing there is we can do on-ground measurements, and then scientifically we also have processes where we can measure cover using remote sensing. So we have used remote sensing in western Victoria, and we are using it now in the eastern Otways to measure any changes in vegetation cover. So that is something down the track that perhaps the Wathaurong would be interested in. Yes, mainly measuring before the fire and then after the fire and then estimating how long it takes for that restoration of those values is what we concentrate on—quite fun.

Ms BATH: Thank you. That is great. I have got another question, Chair. The other thing is you have not a unique but a very longitudinal role that you play in being an educator and being a scientist, and I am interested: in this world I fear that people with certain scientific opinions sometimes overshadow others or that the scientific rigour about scientific debate is hailed down because it is not trendy to have a conversation. So I guess I am appealing to you in terms of your teaching world. How important still is it to have debate? I guess I am putting the point that it is, that there needs to be rigour and that just because it is not trendy you can still have that opinion as long as you have got backup and data. So I just want you to talk about the veracity and importance of scientific debate.

Dr WILSON: Yes. Well, I agree. I saw Kim Lowe give his presentation this morning. The veracity is something that we all as scientists highly regard, and the actual process of submitting and having your work reviewed is very demanding actually. It is quite demanding, and techniques actually change in analysing that data, so that requires changes in our work. And, yes, there can be debate, and also I think you find concentrations of different work in particular areas—for example, my work in finding these refuges. There is not really that much in Australia. There is some really good work that is done in northern Victoria and there is some work done on the coast actually. If you are talking about ‘trendy’, perhaps that kind of work has not really come to people’s attention because they have not been doing that long-term data collection, so you cannot observe them. In terms of scientific debate, yes, I am all for the debate, and I feel that the scientific process is really very, very thorough.

I must say something about that though. It takes a very long time to get some of this data published and reviewed and things like that, and that does not often fit in the scale of what I call adaptive management. I work a lot on ground. I have actually worked in the public service myself. On-ground management needs to respond a bit more quickly than some of the scientific process, so that is always a challenge. For example, if you are carrying out some burning and that is impacting a particular species, it might take 10 years to get your data published, but already you can provide some very high quality evidence, which we call adaptive management, which can change the management. I have some techniques that we have been using which help managers do that, which will give closer-in-time responses. They are called control charts, where you actually just measure the change relative to a mean. Actually it is what your doctor uses when he says, ‘Well, we’ve got to change your medicine and increase the amount that you are taking, because you are over your blood pressure’—or whatever is out of kilt. They use control charts to work out where the changes are occurring in time. They do not want to wait for a long time until things have gone wrong. So I guess I am saying that there are processes that can help managers without waiting for the whole full spectrum of the analysis.

Ms BATH: Would that be something that you could share with us? Is that something that you think might be useful for the committee to see?

Dr WILSON: Yes. We have used control charts very well. I used them in Western Australia and we are using them here in looking at changes in abundance of endangered species and looking at changes in vegetation cover from remote sensing. So you can look over a long period of time: has the vegetation cover in the woodlands in western Victoria changed in particular areas or has it been maintained? If it has been maintained, you do not have to worry, but if it is changing and goes out of kilt—yes, I can provide you with some of that.

The reporting of that is also good because you use these control charts. Like the state of the environment, you can just have your reds, greens and yellows in terms of reporting for someone who does not have a lot of time to have a look at all the data. They can see that this one is—state of the environment—wrong, not working, ‘We’ve got to do something about it’. I think managers like that kind of thing.

The CHAIR: Right, thank you. Mr Grimley.

Mr GRIMLEY: Thanks, Chair. Thank you, Dr Wilson. I have had to relocate from my office to reception as we have lost power down here in Torquay, so I am using my laptop battery. If I just go black all of a sudden, you will know what has happened. Thank you, Dr Wilson, for all your work too that you are doing down in the Western Victoria Region in particular. You are probably acutely aware of the Eden Project, which is planned down at the Anglesea old Alcoa site. I am just interested to hear your views on this project and if you think this is a practical example of good governance and how a program solution can work to facilitate the rehabilitation of an ecosystem and species restoration in that area.

Dr WILSON: I must declare that I have been involved in the process. I am chair of the Anglesea Heath Consultative Committee—I have been on that committee for about 20 years but chair for the last five—where the Eden Project has been going on, so I have worked closely with Alcoa and worked closely with the Eden Project people in putting their view. So I have a dichotomy of views on the project. I think it is fantastic that someone has taken an interest in the area and would develop something that was very good educationally, but they are not doing restoration themselves; that is not their role. Alcoa is doing the restoration, which is under the EPA, the statutory approval process, and they are working through that, which is good. I really like their approach, but I just wonder, because it is a huge project, it is millions of dollars, and it will attract people. Initially the attraction was also for visitors, all the Chinese visitors that we had here in Victoria—that is the way it was going to be funded, because you had hundreds of thousands of people going through there and looking at these wonderful displays they have. We are in a changed world now; things have really changed. I have this other view. I wonder about a less spectacular but more Victorian approach to education, hands-on for students, for people—that is my question. I have not expressed that very much because we have all been in COVID lockdown. That probably has changed—my opinion—over the COVID lockdown. So, yes, that is what it is.

Mr GRIMLEY: Just drawing from that, the shift towards that education process that you speak about, in terms of people that live in Geelong or within the Western Victoria Region, are we aware of the species decline of small mammals and the vegetation dieback as a community? And what can be done about it?

Dr WILSON: No, not at all, and it pains me because I have done a lot of education. I talk to schools, I talk to artists, I talk to anyone who wants to listen. Trying to get the message out or have them understand even the basics, like what the species are—you know, ‘This is a marsupial’, This is a rodent’, and they are Australian. I write articles like, ‘Not Just a Mouse—the New Holland mouse’. Yes, we try, and I think the CMA, education groups and groups like ANGAIR—they do their best but, yes, there is always room for improvement with local education on our flora and fauna. And, you know, we need some emblems; we need some totems ourselves, I think, so that it is more natural or people accept it as part of their environment. I guess it is truly hard with the mammals because you cannot see them; they are nocturnal. But, yes, night walks and things like that where you can search for animals help.

Mr GRIMLEY: Wonderful. Thank you. Thank you, Chair.

The CHAIR: Thank you. Thank you for your presentation today. It has been really interesting. I have just got a clarification around your presentation that you just gave in regard to the New Holland mouse. Can you just clarify for me in case I have got wrong: was there a break in the research? Because I think one of your slides talked about the research that you have done. Can you fill us in on what happened with that, because it looks like there was some research up to about 2007 and then there has been a break and then it has been picked up from there, so can you just go to what might have happened there and fill us in on that?

Dr WILSON: Yes. Thanks for picking it up because it is an important and illustrative process. I actually moved to Western Australia and worked in Western Australia, but that is not the only reason, because there was no-one else to pick up the research and move with it. There was no government department that would continue it. It was only when I, by chance, returned to the area—I was still working in Western Australia—and I said, ‘I wonder how these animals are going’ and started working with Parks Victoria to pick that up. So it just illustrates how it can be dependent on an individual person, whereas you need a system. And I think Kim and David said this morning: you need good government systems which will do monitoring. That can keep us on top of what the changes are and try and see at a very good timescale how the changes are occurring. I have been fortunate to come back and have support from Parks Vic and DELWP and other people, so that is good. But it really pains me—the New Holland mouse, for example, is now being reviewed federally, and it could well be reassigned to critical because it has not been found in the Otways, it has not been found in the whole of Tasmania since the early 2000s and there have been declines in our populations in Gippsland, so—a real challenge to conserve.

The CHAIR: I think from reading your submission as well what has happened in that period is that due to some above-average rainfall there was, I think you called it, irruption to their breeding cycles, which has obviously contributed to the decline, so when you were able to come back in and do that research, you could actually see that this mouse has become potentially critically endangered. That goes to my next thought process around data collection but also perhaps the role that technology could help us play, because one of the things that we are hearing as a theme throughout this is the lack of data or robustness of data and the expense sometimes of actually getting people to go out there and do the counts or collect the data, so I am wondering: how could technology help us play a role in that? I think the bottom line is that what we are hearing is we need to know what is out there in terms of data—what is there; what is endangered, what is not; what is perhaps doing well, what is thriving, what is not—so have you got any suggestions about how data could be collected and how technology can play a role in that?

Dr WILSON: It is a very interesting question, because one of the technological changes in my lifetime has been going from live trapping for animals—and live trapping is really good; you have the animal, you know what sex it is, you know whether it has reproduced—to using remote-sensing cameras, so you know that the animal is there but you do not know whether it has reproduced and you do not know how many are there. I am one of the few people that still uses trapping. My colleague John White has used trapping in the Grampians, and he has got good datasets too. So there is a technological advance that enables you to say that that species is there, but it is not able to tell you how the breeding is going—whether the rainfall has impacted it—very well. So there are pros and cons, but we have ways of actually monitoring and using both techniques to show us different things. So it is an advance in a technique, but it does not always show us. But it can inform you: if you do your camera tracking first and there are hardly any locations for that species, then you might go in and do the intensive work. There are ways of doing cost-benefits about the methods that you use. And you can use indirect methods for some animals: you can actually collect the scats that they leave, so there are some funny kinds of things like that.

I think down the track technologically there is some promise of techniques where you implant the animals with little trackers. You know how people have trackers or some prison systems use trackers? Well, this is kind of a tracker that you are going to implant in the animal, and then you can set up—we already have these—the tag, the chip, to say, ‘Animal number 40 is here’ or that kind of thing. It is very expensive, but we might be able to improve those techniques, I think, for monitoring numbers of animals, because you will know the individual; it will be marked. So there are those types of things. And I think for habitat, remote sensing is the way to go, and that is actually telling us a lot. The satellites are all up there; we do not need drones and things like that. We have all that data, we just need the people that process it. We work with colleagues that process that data, and they are fantastic. Remote-sensing geeks are my great friends. I work with them very well. I use the data; they tell me what it is saying and they collect it. It is a good partnership.

The CHAIR: Great. All right. Look, unfortunately we are out of time. I know a few colleagues joined late. By all means if anyone else has any questions that they were not able to ask today, please feel free to submit them on notice, and perhaps if there are any other questions, you could answer them on notice for us. Colleagues will submit that through the secretariat if there are any more. With that, I would just like to thank you very much for your contribution today. Thank you. It was a very interesting presentation, in particular around the New Holland mouse, so that was fantastic.

Dr WILSON: Thank you very much, and good luck—you have got a lot to look at.

The CHAIR: We do. Thank you.

Witness withdrew.