

# TRANSCRIPT

## LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

### **Inquiry into Ecosystem Decline in Victoria**

Melbourne—Wednesday, 21 April 2021

#### **MEMBERS**

Ms Sonja Terpstra—Chair

Mr Clifford Hayes—Deputy Chair

Dr Matthew Bach

Ms Melina Bath

Dr Catherine Cumming

Mr Stuart Grimley

Mr Andy Meddick

Mr Cesar Melhem

Dr Samantha Ratnam

Ms Nina Taylor

#### **PARTICIPATING MEMBERS**

Ms Georgie Crozier

Mr David Davis

Dr Tien Kieu

Mrs Beverley McArthur

Mr Tim Quilty

**WITNESS**

Dr Jack Pascoe, Conservation and Research Manager, Conservation Ecology Centre.

**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 as well.

I will just take the opportunity to introduce committee members to you at this point. I am Sonja Terpstra. I am the Chair of the Environment and Planning Committee. This is Mr Clifford Hayes, the Deputy Chair, and Dr Sam Ratnam. Joining us via Zoom are Mr Stuart Grimley, Ms Nina Taylor and Dr Matthew Bach. Back in the room we have Mr Andy Meddick, Ms Melina Bath and Mrs Bev McArthur.

All evidence that is taken 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 this 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.

If I could just get you for the Hansard record to state your name and any organisation you are appearing on behalf of.

**Dr PASCOE:** Hi. Jack Pascoe. I am appearing on behalf of the Conservation Ecology Centre.

**The CHAIR:** Great, thank you. With that, I would invite you to make your opening comments, but if you could please just keep them to a maximum of 5 minutes that will allow us plenty of time to ask you questions. Over to you.

**Dr PASCOE:** Sure. Thanks, Chair. Firstly, thanks for acknowledging the Kulin people, whose lands we are meeting on. I would also like to pay my respects to my elders, who continue to pass down the wisdom to me, and I hope they continue to do so for a long time.

Thank you for inviting me. I will probably give a bit of a different presentation to what you have seen. I am sure you have heard lots of facts and figures—and very intelligent people like Barb Wilson will be giving you those—but I just want to give you a bit of story. I am sure you are wondering why there is a picture of a caravan up on screen. I am a Yuin man, but I grew up on Gadubanud country, the easternmost of the Maar people of south-western Victoria. The Gadubanud had a pretty torrid time of it in colonisation, and there are very few people to speak for that country, but it was pretty beautiful, and that is why there is a picture of a caravan I spent the first three years of my life living off and on in up on the screen. I wanted to show you how beautiful that country was—the beautiful white manna gums and how open it was. It had a very large impact on my childhood, and so I wanted you to see it.

What you will notice about this forest, and why you see so little of woodlands like this in south-eastern Australia now, is that whilst it has a beautiful canopy it is a very open understorey, and one of the important things to notice about that is it was very rich in graminoids, grasses, herbs. They were weaving plants, and aunts used to travel hours to come and collect these grasses, and sedges in particular, to weave their baskets and other traditional handicraft. It was full of lilies like vanilla lily, which my daughter is named after, bulbine lily and grains that we use for breads et cetera.

I lived most of my life on this country. Then I went away and studied in Melbourne and Sydney, and by the time I came back and lived full-time in the country it was in the process of basically turning on its head. The

manna gums were dead, pretty much all of that country had gone. The beautiful open understorey had been replaced by an intense midstorey, and that had overshadowed all of those graminoids, herbs and culturally significant species that would have been so important to the Gadubanud people, who were no longer there to care for country.

The symptom of an upside-down bit of country like this was koala overabundance in this instance. Because there was no top-down pressure on them and they were able to take advantage of manna gums, which are a highly nutritious species, they were able to explode in numbers and they took out the canopy of the trees. It is certainly no blame on the koala; it was just an ecosystem well and truly out of balance. In association with this the land management changed, so those beautiful open woodlands that you have seen were an artefact of cultural landscapes. They had been managed like that by Gadubanud people, and the graziers and settlers had taken advantage of that and run cattle intermittently over them, which had maintained that open structure. In fact the property that we showed you had been kept open by cutting hay over summer. But as the land management of Cape Otway changed, the intensification of the shrubs came because there was nothing to keep them in balance plus the opening of the canopy, and all of a sudden those cultural values had gone.

I did not want to make this story about the density of koalas. There is a graph there showing it, because I thought, 'I'm a scientist and I'd better include some numbers'. But the koala population along with the canopy crashed drastically, and you would have seen in the news if you were paying attention at the time that it became quite prominent in the media. Many hundreds of koalas, probably thousands, starved to death as that ecosystem collapsed. Hundreds probably I euthanised myself because that ecosystem could no longer take them and they were starving to death and they could not be rehabilitated. This story though is not about koalas or Cape Otway. I did not want to make it about that, but part of your terms of reference is to understand the impact that ecosystem decline has on First Nations people, and I am sure you can hear it in my voice.

So it was really hard to watch it, and the cynical part of it is that it did not need to be that way. This was not rapid, nor was it unprecedented. Everywhere that koalas have had isolated manna gum woodlands and there is no top-down pressure on koalas, they become overabundant and they take out the forest. Agencies, institutions, politicians were all aware that this was going to happen again at Cape Otway, and because it was a political issue it was allowed to occur. Now, there are numerous ways that we could argue that policy and legislation inhibited this, but in reality this was just a political hot potato, and because of that these forests were able to decline.

So my story, I do not want it to be about Cape Otway or koalas, but whilst ecosystem decline continues to take second fiddle to politics effectively, ecosystems will continue to decline as they are, and regardless of the policies that we put in place to address them we will not win until we actually value them as highly as other things. We can do it for whatever reason. If we need to rely on the importance of ecosystem services for our food production, fine, but I would prefer us to do it because they are an important part of our country and they are an important part of our spirit.

There is a better way of doing it. Aboriginal people have been doing it forever. We have managed country, or our old people have managed country by story. If you need a good example, go and speak to the Maar. John Clarke—and I cannot use the language words because it is not my yarn, but John will take you to a mountain. John Clarke works for Eastern Maar Aboriginal Corporation. He is a Keeray Woorroong man, and he will describe their cultural landscape program. He will stand on a mountain whose language name means 'He who bears his red teeth', giving you an indication that those people and that language group were there when those mountains erupted, and they continue to be here speaking for country. He can point out bandicoot country and snake country, and that is how the country was managed. It was managed in that story for those animals and those species in that way and has been done forever as far as we are concerned. We can use science easily to help us find these management regimes, and we will do this. For instance, this is sediment core data that was taken on the volcanic plains of south-west Victoria that shows a decrease in regular carbon deposits and an increase in the shrubs and a decline in the grasses. So we can see this replicated right across south-eastern Australia. Land management changes and we completely change our ecosystems, and it often leads to drastic declines. Anyway, I was going to go and then talk about what we are doing to address it, but that is 5 minutes so you just get the bad bits—sorry.

**The CHAIR:** Thank you. Mr Meddick.

**Mr MEDDICK:** Thank you, Chair, and thank you, Dr Pascoe. Look, first of all, please do not apologise at all for being emotive or anything like that. The hurt and the pain that we can hear in your voice is driven by the

hurt and the pain that has been suffered by First Nations people clearly across a long period of time. You have had to see the devastation that whitefellas have wrought upon the landscape and all the good work that you have done for untold generations become undone, and I guess that brings me to my point and the question that I want to ask you. Also do not apologise for making this about koalas and about the Otways, because when you focus on an area like that and you can see such drastic change, that is indicative of what is happening across not just the whole of Victoria but the entire country, so please do not. It is a really, really valid and important point to make. I want to ask you, because you talked about how the land management has changed: what has changed so dramatically to give us the situation that we are facing today? Because it is an emergency. It clearly is an emergency and we have to change what we are doing, and that is what I am looking for as well. What is your suggestion? How do we come back to restoring this landscape?

**Dr PASCOE:** So in that instance it was really a move away from, I guess, cutting hay and grazing on that piece of private land, on Cape Otway, that had maintained it in an open way. It certainly was not a cultural landscape. I think first, in order to bring our ecosystems back, we have to understand what they need to be. You just do not hear it articulated from our land management agencies: what is the state that we are looking for? I mean, the best resourced part of the NRM world is hazard reduction burning, but what is the end goal? What are we trying to find in our landscapes? I just keep coming back to the old story. It has to, that management regime, have supported all the biodiversity we are doing our best to get rid of. It has to, because it was there when settlers came. So if we can go back to finding a management regime that is adaptive, that suits the story of the place and the spirit of the place, which the old people around this country, not Victoria but around the country, can tell you—the right story for place—not only will it get rid of these notions of wilderness, which are just out of place in our country, but it will tell us how we need to move forward in managing country.

**Mr MEDDICK:** Thank you so much. Cheers.

**The CHAIR:** Mr Grimley.

**Mr GRIMLEY:** Thank you, Chair. Thank you, Dr Pascoe, for your submission. Clearly I can hear it in your voice the emotions that the impact of ecosystem decline has directly upon yourself, and I admire you for your commitment to the cause. Part of the terms of reference point towards opportunities to restore Victoria's environment while upholding First Peoples connections to country, and my question is just in relation to that. Can you elaborate for the committee on how traditional owners and traditional ways for caring for country are being incorporated specifically into the management of the Otways national park?

**Dr PASCOE:** Yes, I guess my first point around engaging traditional owners in land management is each mob is in a different place in terms of their capacity to engage in these types of processes, and so that needs to be taken into account. For instance, the Eastern Maar are the custodians of the Otway Ranges. They are settling with the Victorian government as we speak and they are slowly building their capacity to work in the NRM space. Because that capacity is still growing, they have taken a focus I guess on specific parts of their landscape. In particular they have an interest in the volcanic plains west and north of the Otway Ranges. They are of particular interest and high biodiversity value if you think of the grasslands. So they are interested in having more of a presence, certainly asserting their cultural landscape plan across their territories, across the volcanic plains, and starting to think about roles they can take up in the management of fire for instance in the western Otways, say the foothills of the Carlisle Heathlands, which have extraordinarily high biodiversity values and a fairly intact mammal assemblage, which maybe Dr Wilson just spoke to you about. There are culturally significant species in that landscape. I guess my final point is: I do not want to speak for the Eastern Maar. It is not traditionally my country. They should be speaking for that country, and they should always be invited to speak on behalf of that country.

**Mr GRIMLEY:** Thank you very much.

**The CHAIR:** Mr Hayes.

**Mr HAYES:** Thank you very much. Thanks, Dr Pascoe. It is wonderful you got to grow up in such a beautiful part of the country. I lived in the foothills of the Otways in the late 80s and early 90s, and it was just a wonderful place to live. I am very sad to see what is happening down there. I was going to ask what caused it, but I sort of want to go to, if I could ask: what was the political hot potato that became the issue or the problem in deciding the direction of that land?

**Dr PASCOE:** Simply koalas, incredibly. The management of koalas is simply very, very controversial. They are just a very attractive—

**Mrs McARTHUR:** Cuddly toy.

**Dr PASCOE:** Yes, exactly. So anything to do with koala management is quite controversial.

**Mr HAYES:** It is too hard.

**Dr PASCOE:** And there is no obvious way of managing an issue of overabundant koalas. Overabundant native species is a tricky situation. I understand. I do not hold the decisions against anyone. It is really that the system that we live within runs away from political risk and it was considered a political risk. That is not my value set and so I implore you all for that not to be your value set, because I think it will take political courage to stand on behalf of ecosystems—extraordinarily. I do not believe that humanity should be in this position, but it is.

**Mr HAYES:** Those sorts of decisions are often very hard, like talking about horses in the high country and things like that. There are emotional connections in both ways, and yes, they are very difficult decisions.

I just also wanted to ask you in regard to that: how do you see better integration of the local people, the Wadawurrung, in the future management of wide tracts of forest and grasslands, not just in the burning aspect but the real management and setting future goals. Are they to get into the public service in some way, or is there some other way of doing it?

**Dr PASCOE:** Again, how the Wadawurrung want to be involved in managing the landscape has to be a question for the Wadawurrung. I think through the process of registering Aboriginal parties there is a go-to, but these corporations are often incredibly poorly resourced. So we go to them and we put out a tender or we say, ‘How would you like us to manage your country?’, and they go, ‘Jeez, what about the other 30 000 processes you’re asking us to engage with, with the four or five staff that we have?’. How do we genuinely expect reasonable engagement when we cannot resource the representative parties that we put in place to represent Aboriginal people? That is what needs to happen. John Clarke—I hope you have an opportunity to talk to John Clarke, representing the Eastern Maar—has a real vision for how his country should be managed. He does not have the resources necessarily to do it in the immediate term. He will, because he just will. I find that a difficult question to answer because it is not for me to answer, but it is the resourcing that has to come first.

**Mr HAYES:** Right. Okay. Thanks.

**The CHAIR:** Ms Taylor.

**Ms TAYLOR:** Thanks very much for your contribution. I think there are many Victorians who are passionate about preserving our forests et cetera into the future. I am just thinking, you were very inspiring today in the way that you shared very authentically, and perhaps that sharing—I am just putting this idea out there—might help to encourage those who perhaps are not as connected to country across the community to feel a greater connection. What are your thoughts on that? I am just thinking that that emotion and that candour can actually be a very helpful influence.

**Dr PASCOE:** Yes, I agree. I guess that is why I am here, isn’t it? It is not the first presentation I have given today. So I guess we do our bit. But I guess there are not that many of us doing this, so the more we tell the story: who is on country looking after it today in my patch of the world?—it just comes down to resourcing. There are just not enough people, black, white or brindle, looking after country. I cannot reiterate that point enough. We have to look after country and we have to be prepared to pay for it.

**The CHAIR:** Ms Bath.

**Ms BATH:** Thank you. Thank you, Dr Pascoe. I think this is a real pleasure to sit with you today. I have heard the term ‘upside down country’ in some of my dealings. I am interested in firestick and the like and upside down country. And I am really interested in the bit about some of the solutions, and I would like to understand your view from your country—so just speak from your perspective—on the role of Indigenous fire in the landscape, on how that could have healed the upside down country that we saw with the manna gum and the role of people, again, and what you see that your people could do on country.

**Dr PASCOE:** I just reiterate I do not live on my traditional lands, but I will talk for that bit of country—and I will not talk for it, I will talk about it. So we did use fire to turn that situation around to a degree. What happens with upside down country is it really references it—it is just the look of it, right, so the roots are up in the air and the leaves are down on the ground. That is simply what the term means. It is upside down. It should be open down on the ground and we should have a beautiful shaded canopy.

**Ms BATH:** Yes, canopy.

**Dr PASCOE:** That is really what that refers to. What it does do is it creates a real issue when applying, I guess, your low-intensity fire methods because there is nothing on the understorey to carry a low-intensity fire. It will not burn on those sort of cooler days or—whether they are cooler or not, but—the lower intensity fire days, but it will burn extremely hot on an intense, or a fire danger day, for instance. There will be enough fuel to carry it through to the canopy easily. So you do need an intervention before traditional fire practices can be applied—sometimes—and I think we will be arguing for a long time on what that is, but I do not think that should stop us from trying things. Some Aboriginal people or some people are mulching and then as the grasses et cetera come back, then they can start applying those lower intensity fires. I work with the Country Fire Authority to apply relatively, for me, hot fires to reduce those midstorey plants, and then we come back before it re-establishes and we can have lower intensity fires through the grassy understorey. That was the reset that we found. And we learned that in the intact parts of the forest that were still there we were able to apply some of those cooler techniques, and we were able to learn what it was that we were going to do through that practice.

I want to pick up your point. You said, ‘What if your people are returned to country? What does that mean?’. Well, for us there is no country without people. We do not call it mother for nothing. Like, it is genuinely a kinship relationship. My people, the Yuin people, the men of the Yuin Nation, with anything worth saying, at the end of it we say, ‘natchatung nunga’, through the mother, because anything worth saying is said through the mother. So people have to be in country for it to be country—that is as simple as it is—and to see the spirit of country and to manage it that way.

**Ms BATH:** Thank you. A supplementary question, Dr Pascoe. Koala populations have been known to boom and bust. They reproduce when there is lots of feed, they grow and then the food source goes. That is the cycle of nature. I am suggesting that. But what has happened here is the tree canopy has died out and therefore the food source has died out. It has also been suggested to me by others that it is also that fire regime that actually stimulates the growth of the new trees and I guess nourishes the soil. Would you like to speak to that?

**Dr PASCOE:** Well, I agree. I think low-intensity fire does nourish the soil, and I have heard many old elders talk about the right colour charcoal being a blanket for country throughout the winter. Whether or not it is a natural cycle for koalas to go up and down, I do not know. I do not think we saw it long enough ago to understand that, but certainly I would be surprised if those trees died out and were replaced again. Our experience is that if you set a fire after the canopy had died or there had been no seeds set for six months, nothing would come back—because of ant predation of seeds, we assume. But I guess ecosystems are finely balanced things and predators are something we have removed from a landscape, be they people—I mean, koalas were basically wiped out from Victoria by the 1920s because of the European fur trade, right? And before that Aboriginal people would have taken advantage of those pelts, and there were dingoes in the landscape. So without top-down pressure—I mean, you can look at examples of it all over the world—ecosystems get out of balance pretty drastically, and it is my suspicion, although very hard to prove, that that is what has happened here. There is no balance.

**Ms BATH:** Thank you very much.

**The CHAIR:** Thank you, Dr Pascoe. I just want to acknowledge your contribution here today and acknowledge the pain and the emotion in your voice when you talked about country before. I just want to also touch on what Mr Meddick said: I agree, do not apologise for anything. It has been really great to hear. It is important for us to hear this from you as well, so I wanted to thank you for that.

One of the things that you talked about which really struck me was when you talked about solutions. You said, ‘We need to look at things that suit the story and the spirit of the place’. How can we impart that into the work that we are doing on this committee and particularly when we are looking at ecosystems? And I agree, what you are saying is ecosystems can get out of balance pretty quickly, and we have seen numerous examples of that. So in any of the work that is being done by this committee or even by people who are having a role in

either conservation and other important points around restoration, how can that concept be incorporated—the story and the spirit of the place? How can we best incorporate that as an approach?

**Dr PASCOE:** The obvious answer is it means really meaningful and long-term engagement with Indigenous people, who, as you build a trust relationship, will start to impart the story for the place. I do not think, though, that that stops people from feeling the spirit of a place. I mean, you can walk through the Alps now and feel that she is not well. You can do the same in the bit of country I live in. You can feel the pain of the country when you walk through Yuin country now, post the 2019–20 fires. I do not think you need to be an Aboriginal person to feel that. I hope you do not have to be, because otherwise we are in a bit of strife, I think. I guess that is the obvious part of the answer, and I have forgotten the gist of the question now.

**The CHAIR:** I think what you have alluded to, though, is also about resourcing. Because it is a big ask, isn't it?

**Dr PASCOE:** Yes. And I genuinely do not believe all the answers are going to come from Aboriginal people. I think there is a massive part to be played by traditional owners because the experience of that culture is so enormous, but by the same token there are non-Indigenous people everywhere working their mooms off to look after country—and they understand country. And often top-down policies and procedures get in the way of the people who work with that country all the time being given the voice to say, 'Actually, that doesn't work here. It might work over the road or it might work 20 kilometres away, but when we do this here, it goes badly'. So those are the voices that we need to empower—black, white or brindle, I think.

**The CHAIR:** So working together, and there is a bit of a theme coming out of this as well about responsiveness. So, like you said, what may work somewhere may not work somewhere else, and being responsive and then adapting—would you agree with that?

**Dr PASCOE:** Yes. And the ability to learn to read country—and once again that is not an Aboriginal thing, although I think our old people are extraordinarily good at it. I love listening to elders who really—that is what they do. They just sit and they know exactly what is going on and the groups of plants that are there and should be there. It is a pretty extraordinary power that they have that is practised observation, really. But it is just coming down to people sitting in a place—well, not necessarily sitting, you could be working—being in a place and being present in a place for long enough to really understand it. And I do not necessarily think the way our institutions and agencies work really supports people to work in a place for a long period of time and really understand it.

**The CHAIR:** Okay. Great. Thanks very much for that. Dr Ratnam.

**Dr RATNAM:** Thank you so much, Dr Pascoe, for your presentation—your really powerful presentation—and submission this afternoon. Just taking up where some of my colleagues have been asking questions around, I was just going to ask: were there other slides you wanted to present in terms of solutions that you have not covered? I would be happy to cede my time to see a few of those if you would like.

**Dr PASCOE:** I have largely talked about it. There were some pictures of birds and plants, but it is all right. You get the gist.

**Dr RATNAM:** Wonderful. No worries. I was going to ask about the work that the Conservation Ecology Centre does. I was just wondering if you wanted to talk a little bit more about some of the conservation work that you are doing. One of the things that we are really thinking about is what solutions and ideas we can suggest to government as a result of this inquiry and being really practical about it, so any of the work that you are doing that could provide examples would be excellent.

**Dr PASCOE:** Thanks for the opportunity actually to speak about my organisation. I work for the Conservation Ecology Centre. We are an NGO and we are importantly in place-based conservation, so we work in the Otways, but really our focus is applied science. So we work really closely with the land managers, be they private, but mostly DELWP and PV, in our landscape. The Great Otway National Park and the Otway Forest Park really dominate the landscape of the Otways. We work with those land managers to identify what are the critical conservation or research questions that have not been answered or that are inhibiting them from effectively managing the landscape. That is sort of what we do. We think there is a real role for NGOs working with government and land managers. We think we can fill that space that does not always get filled. As opposed to a university, with the pressures of publication and getting students through the mill, we do not have that pressure. I mean, we obviously have to report to all sorts of different funders, but we can take on a research

program that is a bit more challenging to get the results that will be publishable I guess without the worry about getting a peer-reviewed paper in the highest impact journal. So I think there is a real role there for applied science through NGOs to be that sort of Selley's gap filler for conservation.

**Dr RATNAM:** Fantastic. Just one more question if there is time. You have talked about the needs in terms of some of this conservation and restoration work that we so desperately need. Resourcing is a big one you have talked about. You have talked about deep and ongoing engagement, particularly with our First Nations, so we can restore that vision. We have that vision of what we want to restore back to as well. If funding was not a barrier and we had a wish list of solutions, were there any other things that you would want to put on our priority list to make sure they come through this inquiry, things that we can do to help?

**Dr PASCOE:** If we could abolish that notion of wilderness and just get people back into places—

**Dr RATNAM:** The separation of—

**Dr PASCOE:** Yes, the lock up and leave it thing. I understand why it was done. Jeez, it has had some impact. You know, just getting people who understand the landscape back in there and doing things on country—it is really important. And, you know, it does not mean that we have got to open up the High Country for grazing again. I mean, really just having people managing that country and keeping an eye on it and understanding it is going to be key, and without it I think it is going to be a pretty big challenge, because we can see the stuff we can see from the highway and maybe we can manage that or the access trails, but there is a lot of country that is difficult to access, so we need people working there and understanding it.

**Dr RATNAM:** Thank you.

**The CHAIR:** Thank you. Dr Bach, I was not sure whether you were there with us, but please, a question from you.

**Dr BACH:** Thanks so much, Chair, and many thanks, Dr Pascoe. You said at the outset that your presentation might be a little different from others, and with all due respect to some of the other witnesses, expert witnesses, that we have had before us today and earlier, yours was uniquely interesting and insightful, so thank you so much. I confess that given that my turn has come so late in the day, a number of my committee colleagues have already asked you questions, sir, that I was really keen to hear the answers to. So I think as a result of that, Chair, it would be most appropriate for me to pass my time to the next committee member. But again, thank you very much for coming and being with us today and for the manner in which you have shared your expert testimony with us.

**Dr PASCOE:** Thank you.

**The CHAIR:** Mrs McArthur.

**Mrs McARTHUR:** Thank you, Chair. Thank you, Dr Bach, and thank you tremendously, Dr Pascoe. I am so pleased to hear you say locking up the forests and throwing away the key is not really the right way to go, and it is so interesting to hear that, you know, it was sort of feel-good intervention that ensured the canopy got lost where we felt it was too politically difficult to reduce the number of koalas in an area and so devastation occurred. I noticed you are interested in doubling the size of government environmental funding, the \$4.5 billion a year. Given the parlous way some of these government agencies manage the environment and waste taxpayer money, do you think that is really a bright idea? I am liking the idea that maybe we could redirect it to NGOs. That sounds like a far better solution than having the relocation of DELWP largely into Fitzroy or wherever we are—with them—instead of being out on the ground doing something. We heard previously from an institution that is part of DELWP and the government that has 150 scientists and is meant to be advising government. It actually had no involvement whatsoever in advising government about dumping waste into Bacchus Marsh or the effects on the environment from the transmission lines. So if we were to double the funding, how can we get it to people like you instead of government agencies which, in my observation out in western Victoria, do a very bad job at managing much of the environment? Is that the way to go—we just relocate it to NGOs?

**Dr PASCOE:** I suspect I did not ever give a figure, but I take your point. Look, firstly, I work with people all across DELWP and PV, and there are some exceptional people doing some exceptional work. I would not take it away from them, because some of them are those people that I talk about who genuinely understand country.

**Mrs McARTHUR:** Out on the ground.

**Dr PASCOE:** That is right, out on the ground, but in Fitzroy too. They have dedicated their lives to really getting results, and I will not take that away from them, because they are exceptional human beings. I think potentially efficiency is not always a bureaucratic—

**Mrs McARTHUR:** Goal?

**Dr PASCOE:** No, I was not going to say that, but big organisations I think by nature tend to be less efficient than smaller ones. So I think there is a real role for NGOs taking a bigger role in conservation, and supporting them is something I would absolutely welcome because of that efficiency, that leanness and, I think, a bit of a willingness to take some risks and do things on country that come with a bit of inherent risk and the freedom that the NGO space allows them to operate in. So I would encourage it, although I do not think I will put a number on it, because that is above my pay grade.

**Mrs McARTHUR:** Well, we just looked at what the figures were and we just doubled it when you said to double it.

**Dr PASCOE:** Yes.

**Mrs McARTHUR:** So I have also had the wonderful experience of learning from an Aboriginal elder about his experiences of caring for country as a young child and the work that was done, particularly in preventing intense burns. I just wonder: why do you think that does not seem to have just been embraced wholeheartedly by government agencies to look after country? Because it seems so obvious.

**Dr PASCOE:** I think it is becoming embraced now. It is no secret that the traditional ecological knowledge of Aboriginal people was not valued for a very long time. I think it is becoming so now, but in that process it has not been practised for a long time. In many situations it has, but in your landscape, for instance, it has not been practised for a long time. I do not think you will have to ask too many traditional owners if they have ever had one of their elders locked up for starting fires, for instance. Those stories are legion.

**Mrs McARTHUR:** Are legendary.

**Dr PASCOE:** Right. So there is that interruption of practice. So why hasn't it been taken up wholeheartedly previously? Probably because it was not seen for a generation, so what was there to take up? I think it is now. I think we have to be careful expecting a practice that was developed over a very long time in a climate and a landscape that were very different to come in and save the day now. It absolutely has a role to play, and it will have a role to play, but it cannot be expected to undo the damage of generations of neglect.

**Mrs McARTHUR:** Neglect, yes. And also the other interesting thing is that when I have been talking to Aboriginal carers of the land they have talked about how in order to gather their food they would cool burn an area because the native grasses benefited from grazing and burning, and that way it provided a natural fenced-off area without a fence for the native species to come and graze. Because the kangaroos and wallabies, you see them on golf courses down near Lorne, very close to habitation, where they are grazing on shorter grasses that really are very beneficial for them. So the idea that we cannot graze native land, native grasses, is also foreign. Would you comment?

**Dr PASCOE:** I agree. Absolutely native pasture has a role to play. The other organisation I am heavily involved in is I am the chair of Black Duck Foods, and one of the things we are trying to do is incorporate native grasses and foods back into the agricultural system. We do not focus on it as pasture; we focus on it as a food in and of itself. But we know that in tackling climate change, perennial grasses are extremely important with their ability to bring carbon back into a landscape. And I guess we are talking about ecosystems now in more of an agricultural setting, and as it was for traditional Aboriginal people, there were landscapes that were agricultural and they still supported a biodiverse landscape. Yes, so I think there is absolutely a role for that, I agree.

**The CHAIR:** All right. Well, thank you very much, Dr Pascoe, for your contribution today and the evidence that you provided. It has been a really insightful presentation, so thank you very much.

**Witness withdrew.**