

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Ecosystem Decline in Victoria

Melbourne—Thursday, 26 August 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

WITNESSES (*via videoconference*)

Mr Vic Jurskis, Committee Member, and

Mr John Mulligan, Committee Member, the Howitt Society.

The CHAIR: I declare open the Legislative Council Environment and Planning Committee's 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 Aboriginal peoples, the traditional custodians of the various lands we are gathered on today, and pay my respect to their elders, ancestors 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.

At this juncture I will take the opportunity to introduce committee members to you both. My name is Sonja Terpstra; I am the Chair of the Environment and Planning Committee. Also appearing with me via Zoom today are Mr Clifford Hayes, who is the Deputy Chair; Ms Nina Taylor; Dr Samantha Ratnam; Mrs Bev McArthur; and Ms Melina Bath.

Now, 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 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 thing, 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.

I will call on you individually in a second, but could I get you both for the Hansard record to please state your name and any organisation you are appearing on behalf of. So, Vic, can we start with you.

Mr JURSKIS: G'day. Vic Jurskis. I am representing the Howitt Society.

The CHAIR: Thank you. And John.

Mr MULLIGAN: I am John Mulligan. I am in the Howitt Society as well.

The CHAIR: Great. Thanks so much for that. With that, I will hand over to you individually now to make some opening remarks. You are both appearing on behalf of the Howitt Society, so I do not mind whether you both want to give some opening remarks or if you have decided which one of you will give the opening remarks. Vic or John.

Mr JURSKIS: Yes, I will give some remarks, and then John will give some as well.

The CHAIR: Okay. We have got about 6 minutes or so—if I could get you to confine your opening remarks to that. And then I will hand over to committee members, who will ask you some questions. So, Vic, over to you to begin.

Mr MULLIGAN: Is that 6 minutes each or 5 minutes each?

The CHAIR: No, you will get 6 minutes, because there are two of you. We have got a short amount of time. Most people get a 5-minute introductory statement, but we have got 45 minutes for this session. So when people ask you questions there will be an opportunity for you to add to your answers, okay?

Mr JURSKIS: Good afternoon. I am Vic Jurskis, representing the Howitt Society. We want to bring back healthy and safe landscapes. You have our submission and a poster illustrating that ecosystems need people.

We can get that up on the screen later if members want to refer to it. Victoria's ecosystems started to decline from 1789, before Europeans arrived. A smallpox epidemic swept down from the north, decimating the Aboriginal populations and reducing their capacity to manage the land. The Kurnai people of the Gippsland plains were not affected, so there is a huge difference in the history of the plains compared to the Strzelecki Ranges, where the Yowenjerre people were virtually wiped out by the epidemic. Strzelecki's party were the only explorers who ever saw koalas. They lived on them when they struggled for 26 days through 50 miles of dense young scrub—that is 2 miles a day. There were no kangaroos, emus or bettongs to eat because the dense scrub had choked out the grassy ground layer.

The thick forest was generated by our first mega-fire around 1820. Without the firesticks, scrubby understoreys escaped from deep, dark gullies and took over the landscape. Droughts with searing heat and scorching winds have been a regular occurrence for many thousands of years. In one such episode a lightning strike ignited the explosive 3D fuels. Droughts end in floods, so the eucalypts germinated as thick as hairs on a cat.

After Aboriginal management was disrupted across Victoria, the same thing happened on a huge scale. Five million hectares were incinerated by the Black Thursday fires in 1851, and young even-aged forests replaced the natural ecosystems. Europeans started clearing the Strzeleckis in the 1870s and found grindstones, clay ovens, stone axes and spear points. They realised it had been open, grassy country. There were plagues of dingoes feeding on plagues of koalas. Despite what you have heard from other people, dingoes never controlled them; koalas were naturally rare because of the scarcity of their food in healthy, mature forests; they eat soft young shoots.

Our obsession with forests is extraordinary. No forest-dependent species have disappeared since Europeans arrived. Many, like koalas, psyllids, bellbirds and lyrebirds, have irrupted. But we have lost 21 little mammals from Victoria. They were ground-dwelling species that fed on herbs, grasses and seeds or preyed on other animals that relied on the herbs. Fifteen of them lived only in a small area of Mallee in the north-west. It had nothing to do with logging or clearing; the great central scrub choked out their habitat. Henry Lawson told us how things changed. He said:

No sign that green grass ever grew in scrubs that blazed beneath the sun ...

It was not down to foxes or cats either. The little native animals disappeared before feral predators took over, but they survived alongside feral cats in the western deserts until traditional Aborigines walked off their land. Then dense veg and mega-fires destroyed their habitat.

150 years ago Howitt recognised that disruption of Aboriginal burning caused eucalypt declines that were blamed on insect plagues. He described the death of large tracts of red gum on the Gippsland plains and manna gum at Omeo. Today we call it rural tree dieback in Gippsland, Monaro dieback just over the border and koala overbrowsing at Cape Otway. But studies across Australia and around the world have shown that forests decline and pests irrupt when we do not burn or when we add fertilisers and pollution – and grazing of native pastures can also perform a similar ecological function as burning. Without ecological maintenance by burning or grazing, soil physics and chemistry change and vegetation responds, reinforcing the changes. Topsoils get cool, damp, soft and deep. The eucalypt roots deteriorate. Trees get sick. Nitrogen accumulates in the soil and the developing shrubbery. This produces the 3D fuels that explode in firestorms in bad weather. Pests and understoreys proliferate, and sick trees constantly reshoot young, soft leaves until they run out of water and nutrients.

Meanwhile the animals that live on the ground that should be sunny, airy and grassy disappear. There are only three mammals that are critically endangered in Victoria today, and none of them are arboreal or forest dependent. The mountain pygmy possum is rare because it lives in alpine boulder fields, where it can survive under the snow. This habitat was protected by Aborigines when they burnt when they were feasting on Bogong moths, and mountain cattlemen continued the tradition. Since the alpine habitats have been protected, they have been incinerated by a succession of mega-fires. There have also been a lot less moths turning up in the mountains, because they breed in the Murray-Darling, where their grubs feed on weeds, crops and pastures. They used to feed on drought-adapted vegetation that disappeared along with Aboriginal burning. But now the weeds and crops disappear when irrigation water is diverted for so-called environmental flows, which top up an artificial freshwater lake at the mouth of the Murray, so the moths and the pygmy possums are both in strife. The brush-tailed—

The CHAIR: Sorry, just letting you know you have got approximately 3 minutes left, so if you want John to supplement anything you are saying, you may at some point have to hand over to John as well.

Mr JURSKIS: Okay, I have just got a couple of sentences to go. The brush-tailed rock wallaby and the southern bent-wing bat are the same. They are not forest dependent. But anyway, Victor Steffensen says we should not manage for species; we need to see the big picture and maintain the whole landscape for the right fire. Fair dinkum science agrees. Now I can hand over to my respected elder, John Mulligan.

The CHAIR: Thanks, Vic. John, over to you.

Mr MULLIGAN: Righto. Look, I am 90 years of age, and it is with extreme sadness that I have seen this decline, which is massive, particularly in the far east, which I know best. Just one form of the decline is that the forests are being killed by fire and are being replaced by dense, impenetrable woody scrub—wattles, blackberries et cetera. There is minimal canopy left for canopy-dwelling fauna. This thick scrub will tend to create highly flammable scrub desert. There has also been an effect on streams because of the massive amount of ash in the waterways, resulting in fish kills and who knows what else.

This decline is related to the intense, damaging fires of recent times. The government is not learning from its mistakes. Rather, it wants to blame global warming. The degree of decline in our biodiversity is hard to quantify, as there is in Gippsland no undamaged forest against which you can make comparisons. It is only elderly people like me who have lived and worked in the bush who have seen the change over the years.

The position, as bad as it is, is only going to get worse, as this government is seriously lacking in its ability to manage fire. For instance, *Catalyst*, the ABC's principal program on scientific matters, on 3 June 2014 stated that:

Nearly ninety percent of the Australian Alps bioregion has been burned, and 97 percent of the regenerating alpine ash forests have been killed ...

and that Australian governments have repeatedly ignored warnings to reduce extreme bushfire fuels at the cost of people's lives.

Some of these warnings are: the 1939 Black Friday royal commission warned controlled burning 'was ridiculously inadequate'. In 1983 the Ash Wednesday bushfire review committee warned 'the amount of fuel reduction burning was too low'. In 1992 the Auditor-General warned that the failure of the government left us more susceptible to fires. In 1994 CSIRO chief fire expert warned about a decline in the area of prescribed burning. In 2003 a federal parliamentary report warned of 'grossly inadequate hazard reduction burning on public lands'. In 2007 a parliamentary committee warned the government to increase its prescribed burning target to 5 per cent of public land. In 2010 the Victorian Bushfires Royal Commission prescribed burning strategically to maximise risk reduction of 5 to 8 per cent as necessary for community safety.

The destructive consequences of governments not acting on their own expert warnings to reduce fuel were seen in just one fuel-driven fire on Black Saturday. The Kilmore East fire burnt an area of 10 hectares per second, which was 35 000 hectares in an hour.

The CHAIR: You have got about a minute left, John.

Mr MULLIGAN: Oh, gee whiz. Also, after his inquiry into the Yallourn fire of 1944 Judge Stretton said not enough burning had been done. Those areas that had been burnt by fuel reduction burning stood out as an oasis of green in a sea of black.

I and many others, foresters and fire scientists included, believe we should be making sure that 10 to 20 per cent of the forested estate should be burnt by fuel reduction burns each year to render the forest reasonably safe. Victoria is not prepared for bushfires, nor will strengthening its firefighting capabilities make it so. Only the reduction of flammable fuels can do that. To fix the ecosystems we first have to fix the burning problem. Righto, that will do.

The CHAIR: All right. Thanks very much.

Mr MULLIGAN: I could talk for an hour, but that is—

The CHAIR: Well, we will ask you questions and you will have an opportunity to talk, so it will be the same thing. John, thank you. All right. We will hand over to questions now. Ms Bath, over to you.

Ms BATH: Thank you, Chair, and thanks, gentlemen, for being here today. John, you mentioned that you are 90. Doing my maths, you would have been alive during the 1939 fires, and you are from East Gippsland, I understand. Could you describe your experiences with those and describe what was happening, I guess, back in your youth in relation to—whether we called them—preparatory burns back then or fuel mitigation burns or cooler burns?

Mr MULLIGAN: Well, in those days, when I was a lad, I do remember the day of the 1939 fire. I travelled from Gipsy Point to Cann River and returned with my uncle. It was a stinking hot day. There were fires in the district, but none of them came together to form a big fire. It was so hot the petrol in the car was vaporising in the fuel pump, so we were in trouble all day. But, yes, all my younger life in the summer, particularly autumn, there was smoke in the sky out in far East Gippsland. There was always fire, and it was started by natural causes, very often by lightning. But also all the settlers and graziers—we used to burn every year. The bush was open, clear, and the flame height was very low. There was not the intensity we have in the fires today. For instance, our cattle in the bush—we never shifted them for fear of them being burnt. They survived all these light fires.

In the 1939 fire, east of Orbost, the fire did not take hold like it did in West Gippsland, where it was such a disaster, as you know. But Judge Stretton claimed that the area east of Orbost contained the last bastion of the bush burners. ‘They were men of a terrible reputation’—they were his words. But on that day in 1939 we were very lucky that we had those men, because our bush was in such a state that these fires did not come together and create a catastrophe like what happened in West Gippsland. So what else?

Ms BATH: Thank you, John. Thank you very much, Mr Mulligan. Can I direct my next question to Mr Jurksis. Looking at the Howitt Society’s report or submission to us, it really, to my mind, predicates that life went wrong when we removed cool Indigenous burns from the landscapes. When I look at your commentary around koalas, for example, and their fluctuations, you talk about their fluctuations in terms of the overabundance of small, juicy leaves and then the mature woodiness—if that is a word. So I am interested for you to develop the commentary around koalas more and how they have cycled, if you want to talk about Victoria. Just explain that in the context of the Indigenous burns.

Mr JURSKIS: Thanks, Melina. Koalas are just one species that irrupted when we disrupted Aboriginal burning. There were many others that did as well, and then there were the small mammals that we lost on the other hand. When we disrupted Aboriginal burning we upset the balance that maintained healthy mature trees and diverse, grassy ground layers and everything that depended on them. Koalas were naturally a very rare species, because soft young growth is a rare commodity in healthy mature forests, and koalas only lived in forests. They were confined to forests. No explorers, apart from Strzelecki, ever saw koalas, because they did not live in the woodlands and the grassy areas that Europeans sought for agriculture. They only moved into those areas after they irrupted from the forests and the woodland trees got sick. When people sowed pastures and changed the soils the trees got sick and started recycling soft young growth, so the koalas irrupted in the forests from lack of burning and in the woodlands from the trees being sick. The young koalas are very mobile, and they go out looking for new territory to occupy. So it was not just in Victoria. There is a great myth about koalas irrupting in Victoria because they were translocated. That is absolute nonsense. Koalas like any other animal irrupt when there is an abundance of food, and the abundance of food has been as a result of the growth of dense young forests with disruption of burning and the sickening of old woodland trees with either just disruptions of burning and/or pasture improvement. So koalas irrupted right across their range, except in far northern Queensland, where there was very limited agricultural development and they still maintained the traditional burning practices. The only difference between Victoria and other places is in the timing, but, in general from south-east Queensland down to Victoria and South Australia the koalas crashed in the federation drought because they were relying on all this soft young growth that collapsed in the federation drought, and then they disappeared from the woodland valleys and things where they never really lived anyway before whitefellas came along.

The Senate inquiry was sold a huge pup by the NGOs and the koala industry. They believed that there were millions of koalas when Europeans arrived. That is absolute nonsense. The famous naturalist John Gould had

trouble finding koalas in 1840 and he predicted their extinction. The koala industry started in the 1870s and 1880s, long after they had irrupted—

Ms BATH: Sorry, Vic, can I just interrupt you? I am conscious of our time. You might have some history that you can give to us in relation to where we are up to now with koalas. I guess we have got to make recommendations for this report. What needs to happen for there to be a healthy and sustainable koala population? What in your position needs to happen?

Mr JURSKIS: Yes. Nearly all the koala populations that have been studied and written about are all unsustainably dense populations. Healthy sustainable populations are in the order of one koala per 100 hectares. The densities at Cape Otway at the moment are, like, 20 per hectare—or they were recently. That is 2000 times the natural density. So what needs to happen is that we need to restore healthy forests and low sustainable densities of koalas. In the meantime you have got the animal welfare problem of what to do with all the surplus. The idea of translocating them somewhere else in the bush does not work. All the translocations have always been into areas where there are already koalas. The reason they have gone mad after translocation is because people have excluded fire from the areas where they have translocated koalas. So we need to restore healthy management, and we need to deal with our animal welfare problem. The best way to deal with that would be by exporting young koalas to all the zoos around Australia and the world that would love to have them and grow plantations to feed them.

The koalas are a problem in the plantations in the green triangle—the eucalypt plantations—where they did not live when the explorers went through. It is the same thing again. We planted lots of trees and koalas went mad. Well, we can use the knowledge to put the bush back into a sustainable condition, with low-density, invisible koalas virtually, and we can manage plantations and so forth to produce koalas as well as timber. We just need to recognise that just like a farming enterprise you have got to get rid of the young ones, or you have got to get rid of some of the stock. You have got to keep sustainable levels according to carrying capacity.

The CHAIR: I am conscious of time, so we will have to move on. Dr Ratnam, a question?

Dr RATNAM: Thank you, Chair. Just a quick question. Mr Jurskis, in terms of some of the assertions you have made, both through your evidence here today and the submission that the Howitt Society provided, I was just wondering if there was any peer-reviewed research for your assertions—so potentially anything you have co-authored.

Mr JURSKIS: Yes. Yes, there certainly is peer-reviewed research. I am the only person that has ever written a comprehensive review, published a comprehensive review, of the ecological history of the koala across its range, and I believe that I have actually supplied that to the committee. If I have not, I certainly can.

Dr RATNAM: And that was peer-reviewed research, was it, Mr Jurskis?

Mr JURSKIS: It certainly was, yes.

Dr RATNAM: Okay. In the form of a journal article or a book, is that right?

Mr JURSKIS: Yes, it was a journal article.

Dr RATNAM: Okay, I will have a look at that.

Mr JURSKIS: It was a peer-reviewed journal article, and it was—

The CHAIR: If you would like to provide it, if you have not already—

Dr RATNAM: Thank you. I am happy to follow it up.

The CHAIR: Sorry, Dr Ratnam. I am just saying, Mr Jurskis, if you would like to provide it that would help the committee. If you have not already, that would be great. Sorry, Dr Ratnam.

Mr JURSKIS: Yes, well—

Dr RATNAM: No problem. Just a quick follow-up question: just in terms of the Howitt Society, I am just trying to get a sense of kind of the mission of the society in terms of some of the evidence that we have heard. You sound like you have a particular interest in planned burns and fire management as a tool. Is your primary interest in preventing biodiversity loss and conservation? Because I am just thinking about the relevance of your evidence for the terms of reference for this inquiry. So what is the prime purpose of your organisation?

Mr JURSKIS: Our vision is to restore healthy and safe landscapes. That is about biodiversity and about safety.

Dr RATNAM: And you are only asserting that fire is the only tool we have available for that?

Mr JURSKIS: Fire is an essential tool for all purposes. As Victor Steffensen says, 'It is the right fire for all things'. It is for biodiversity. It is for access. It is for safety. It is for health.

Dr RATNAM: Do you think we should be doing anything else apart from fire management to restore ecosystems?

Mr JURSKIS: Fire management is the only thing that we can apply across all tenures that will actually have an effect. The only real environmental problem in Australia is the lack of ecological maintenance by mild fire. Aborigines set up a system more than 40 000 years ago that absolutely relies on mild fire to maintain biodiversity and health and safety.

Dr RATNAM: Thanks for that, Mr Jurskis, but that is actually contrary to the raft of evidence we have heard over the last eight months of this inquiry in terms of the drivers of biodiversity loss, including climate change, habitat loss, invasive species and significant issues with both the strength of our laws and the enforcement and resourcing of our laws to implement and to gain that protection. So it is actually quite contrary to the evidence that we have heard that stopping biodiversity loss can only be achieved through fire management.

So I just wanted to—yes, I guess there is no question there. I have no further questions, because it seems to be in total contrast to the majority of experts we have heard throughout this inquiry that it is actually a much more complicated system and there are many more levers that we have to prevent biodiversity loss than just fire.

Mr JURSKIS: That is the problem: that you have not heard the true evidence. You have heard a lot of evidence that is wrong.

The CHAIR: All right. I understand, though, Mr Jurskis, you are particularly talking about fire in the landscape, so I understand where you were coming from in terms of your experiences. So it is sort of clear to me where you were coming from. Anyway, we will go to Mr Hayes now for a question.

Mr HAYES: Thanks, Chair. Thank you very much for your submissions here today, Vic and John. Yes, I am very interested in the role of Aboriginal cultural burns in the management of our ecosystems. I am very keen to promote that idea. We have seen demonstrations of the cool burns and how they are done at different times of the year, and they are not done the way that the department does them. Also, the Indigenous leaders who were doing this fire burn also pointed to water management being an essential component in getting a healthy ecosystem together, too. But I am just wondering how you would see Indigenous people taking a bigger role in the management of forest systems, including cultural burning and other practices that encourage a healthy forest rather than what they were calling a 'sick forest'.

Mr MULLIGAN: I would like to butt in here a bit, I think. As well as the Aboriginal burning, you cannot discount the natural burning that was going on. Since the first settlements of about 1840 there were very few Aborigines in far East Gippsland. The burning that was done was done by natural burning, which was lightning strikes—and that was continuous of course—and then also the settlers burning the bush to provide feed for their stock, as they had seen the bush in the state it was when they came here. So they did a lot of burning. But as I said, the Aborigines at that stage in our area of Gippsland—I am not saying other areas—there were very few there. So it was mostly natural burning and the settlers and stockmen doing the burning, and everybody who lived there burnt to protect their property. Now, what was your other question?

Mr HAYES: Yes, it was just about how you could see more of the Indigenous cultural burns and forest management become more incorporated in our system.

Mr JURSKIS: I would like to say that it is too big a job for any one section of society, Aboriginal or otherwise, to handle. We need to manage the whole landscape. John said that there was not that much Aboriginal burning in the early days. Well, that was after the smallpox. But the whole point is that the whole landscape has to be managed and it is too big a job for just one section or one tenure or whatever. It has got to be across the whole landscape. The way that foresters brought it back in the mid 20th century, after trying to exclude fire and having all the disasters and insect plagues and all the rest of it, was by introducing broad-area burning with aerial ignition. Now, the Aboriginal people in west Arnhem Land have combined modern technology with traditional techniques. They are applying traditional burning with helicopter ignition, and they are actually getting carbon credits for reducing carbon dioxide outputs from late-season fires by using traditional burning with modern technology and doing it at the right time, early in the season, as soon as fuels dry out. That is the sort of model that needs to be applied right across Australia, right across our landscape. We have to treat the whole landscape, for both reasons, for biodiversity and for safety, or three reasons, biodiversity, health and safety, and the only way we can do it is by all sections of the community combining and doing things on a genuine landscape scale and using all the technology and resources that we have got.

Mr HAYES: Thank you.

Mr MULLIGAN: Further to that, in my submission I put forward the thought that we would have to dispense pretty well with DELWP or the practices of DELWP as they are at the moment and we would be best advised to employ small gangs allocated to a small amount of bush which they would have to study and know, and they would do the burning on that patch. If necessary, they would maintain it. They would be a small group with their own little bulldozer, grader and all the rest of it. They would be highly paid, and they would have to live on that patch, not in the nearest town. If the town was close to their area, that is okay. But they would have to be on hand, and they would have to make their own decisions as to when to burn. They could burn small patches, and they could look after their patch. Whereas at the moment, with centralised control by DELWP, you have people coming up—they employ summer gangs and gangs for this and gangs for that. And these people come into an area. They do not know an area; they do not give a stuff. All they want is their pay. Whereas what I propose are small gangs of men with a specific area that they have to look after, and they study it; they know it. Now, that would be an area where they could incorporate Aboriginal employees in that, to get that side of things going. But the system as it is today does not work. It is failing badly.

Mr HAYES: Thanks, John. Yes, we have heard a bit about local protection. Thank you.

The CHAIR: We will move on, Mr Hayes, and I will throw to Ms Taylor for a question.

Ms TAYLOR: You mentioned a bit about climate change before, human-induced climate change, and I was just wondering what role you think that plays in increasing extreme weather conditions and exacerbating the prevalence and risk of fire.

Mr JURSKIS: It does not play a role at all. We had extreme drought and three seasons of extreme fire weather in the early 1790s during the settlement drought, and there were Aboriginal fires burning constantly, 24/7, in what is now the Wollemi wilderness during Black Summer, we set a world record for the largest fire that ever happened from a single natural ignition by lightning. It was not wilderness then. It was country that was occupied and managed by Aborigines, and it was constantly burning. It was not a problem because we did not have three-dimensionally continuous fuels, and despite extreme drought and extreme fire weather there were no disasters. Fires reached the European settlements in Sydney and Parramatta on one occasion, and they were handled with hand tools and green branches. A hut in Sydney and a hut in Parramatta got burnt. They were huts with thatched roofs. This was under extreme conditions, and they did not have water bombers and fire engines and all the rest of it. The cause of uncontrollable firestorms and mega-fires is not climate or weather. It is three-dimensionally continuous fuel, and if you do not have that, you do not have disasters. Aborigines survived more than 40 000 years of extreme climate change without boots or overalls, let alone water bombers and fire engines and computer models.

Ms TAYLOR: That is an interesting perspective—not one that I have actually heard before, but it is an interesting one. There you go.

Mr JURSKIS: It is an historical one.

The CHAIR: Anything further, Ms Taylor?

Ms TAYLOR: I do not quite know where to go. But you would have to admit the world was a little bit different back then. We have had an industrial revolution. We have had millions of tons of CO₂ pumped out to the atmosphere and massive change, massive land clearing. You don't think any of that has any contribution to some of the ecosystem decline that we are experiencing to date, so to speak.

Mr JURSKIS: Well, the evidence is quite clear. Our world-famous small mammal extinctions were not in forests. They were in arid and semi-arid zones. They had nothing to do with logging or clearing. They were entirely due to the growth of scrub that choked out the diverse ground layers that used to sustain those small mammals. The historical evidence is absolutely crystal clear. There have not been any animals made extinct as a result of native forest logging or anything like that. All the angst and all the hype are entirely misdirected. If you want to look after the environment, if you want to look after the biodiversity, you have got to manage how it was set up. It was set up to be managed by frequent mild burning. That is ecological maintenance. People carry on about fuel reduction and all the rest of. If you manage the landscape properly, fuel does not accumulate. We have completely lost the perspective of how our systems are meant to work. The early explorers recognised all of this. They all wrote about it, and the naturalists, like Howitt, all recognised exactly how the system worked, and then we have had academics that have come up with silly theories that overturned it all and put us in the mess that we are in.

The CHAIR: All right. Great. Thanks very much, Vic and John, for coming along to the hearing today and presenting your evidence and for your contribution.

Witnesses withdrew.