

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Ecosystem Decline in Victoria

Melbourne—Tuesday, 20 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

WITNESSES

Mr Paul Sullivan, Chief Executive Officer, and

Dr Grainne Maguire, Coastal Birds Program Leader, BirdLife Australia (*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 as well.

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

The evidence that you will be giving today and that will be taken 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.

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

Mr SULLIVAN: Sure. Thank you, Chair. My name is Paul Sullivan. I am the Chief Executive of BirdLife Australia.

The CHAIR: Thank you.

Dr MAGUIRE: My name is Dr Grainne Maguire, and I am the Coastal Birds Program Leader at BirdLife Australia.

The CHAIR: Great, thank you. With that, if I could get you to make your opening comments, but if you could just keep them to about a maximum of 5 minutes and then that will give plenty of time for committee members to then ask questions of you. So I will hand it over to you. Thanks.

Visual presentation.

Mr SULLIVAN: Sure. Thank you, Chair, and I thank the committee for the opportunity to appear before you today. I do have a PowerPoint to share and I will try and endeavour to get through it as quickly as I can. Hopefully you can see something on the screen right now.

The CHAIR: Yes, we can.

Mr SULLIVAN: Okay. So just introducing BirdLife and our work, BirdLife Australia is a science-based, grassroots conservation charity with over 220 000 supporters throughout Australia. Our organisation is part of the world's largest global partnership through BirdLife International. Our bird conservation programs adopt a long-term, multi-species and landscape approach to the conservation of migratory shorebirds, beach-nesting shorebirds, woodland birds, mallee birds and many others. I guess our key messages today are birds are in severe decline in Victoria and nationally and globally, habitat destruction is by far the biggest threat and just a

message of hope that species conservation does work when we follow the science and we resource it properly. BirdLife Australia and I know other conservation organisations are ready to be part of the solution to reverse biodiversity declines, but we need government to show some leadership in putting the right regulatory and investment frameworks in place.

The bird you can see on the screen is a chirruping wedgebill, and it is now extinct in Victoria. Extinction is a global problem, but according to the IUCN's red list Australia is one of the worst performers, and that is the result of unsustainable agriculture, mining and urban development. Extinction also has its economic consequences for humans. Species deliver ecosystem services for free, such as crop pollination, and birds are a part of that. Birds disperse seeds and assist their germination. They act as living pest controllers, and they act as part of the nutrient cycle in land and sea.

The perilous state of nature is reflected in this graph here, which is Victoria's threatened bird index, which only includes 18 taxa. It would include many more, but the data is too poor to run actual indices for them. 128 birds are listed on Victoria's advisory list, and 74 of those are listed under the *Flora and Fauna Guarantee Act*. BirdLife also published data in 2015, which showed that many of Victoria's common bird species are also in significant decline, and we actually anticipate that the rate of EPBC listings—that is new listings and up-listings—will only increase in volume and pace over the next 10 to 50 years.

What can we do to halt the extinction crisis? Well, a good start is to stop habitat destruction. The protection of critical habitat—and you can see this graph here, and that is the kind of graph we like to see—shows the effectiveness of the USA's *Endangered Species Act*, which was a key driver in the recovery of almost 99 per cent of species under its care. I guess the key point here is that strong environmental laws do work, and that is a pretty salient point to make at this current time.

But I would also like to make a quick point about the summer bushfires and the effect that that they have had on bird populations—45 bird taxa lost more than 30 per cent of their habitat, including Victorian species such as the glossy black cockatoo, the eastern ground parrot and the masked owl. And whilst it is great that the Victorian government is working with BirdLife on many of those recovery projects for those species, the logging of native forests and poorly planned prescribed burns are undermining some of that great work. Just for an example, BirdLife recently stepped in to prevent planned burns of she-oak refuges in East Gippsland, which are critical for the survival of glossy blacks, which were impacted by the fires.

I will just put a holding point here that we think the current piecemeal approach to the reform of the EPBC Act will further decrease environmental protection in Australia, and that might be something worth discussing with the committee.

We know that fragmented landscapes in Victoria make up almost 79 per cent of Victoria's native vegetation. In a message of hope BirdLife is bringing birds and biodiversity back to Victoria by working with the agricultural sector and local communities, and we want to do more. We are exploring opportunities to do this at a landscape scale in collaboration with other nature conservation groups to reach, vegetate, improve and covenant remnant habitat at a much greater scale. In order for the Victorian government to achieve its Biodiversity 2037 objectives we really need to think big at this scale and mobilise funding for programs like this.

I will just hand over to Grainne, who will make a few quick points about the importance of critical habitat and recovery planning for hooded plovers. Maybe this is something we could dig into in a little bit more detail during the questions.

Dr MAGUIRE: As a quick case study, the hooded plover is a threatened resident beach-dependent shorebird listed as vulnerable in Victoria and also nationally threatened. They are an example of a successful threatened species recovery project led by an NGO but where recovery is now limited by a lack of statewide powers or a mechanism to protect habitat and mitigate threats further. Hooded plovers experience poor breeding success primarily due to human-based threats such as disturbance and predation of chicks by off-leash dogs as well as habitat loss due to development and coastal armouring, for example. If critical habitat was declared under the *Flora and Fauna Guarantee Act* and a set of protections were enforceable for this critical habitat, this would mean standardised protections that were not subject to frequent change as our local council by-laws and it would greatly free up capacity to tackle recovery actions and create long-term sustainable threat

mitigation. It would achieve large wins for low cost. The mechanism exists to declare critical habitat but has never been implemented.

Mr SULLIVAN: Thanks, Grainne. Just to sum up, reversing ecosystem declines and recovering threatened species requires leadership from governments, including more capacity, resources and regulatory reform. But speaking on behalf of BirdLife, we are ready to step up. There is a massive job ahead, and we need to throw some resources into the recovery of species and stop these things from crisis.

The CHAIR: Great. Thank you. All right, we will throw to questions. Dr Ratnam.

Dr RATNAM: Thanks so much for your presentation and all the incredible work that you do. A couple of questions that are linked to each other: firstly, one of the things I am really keen to hear more about is the specific work that BirdLife Australia has done for individual threatened species recovery, which you have alluded to in your presentation—for example, under the New South Wales Saving our Species program. My first question is: what kind of projects have you been involved in and what has the outcome been in individual species recovery? My second question linked to that is: we have heard in this inquiry about the two different approaches to addressing threatened species and ensuring their survival—landscape-based approaches and individual species recovery led approaches. We have heard that Victoria has favoured the landscape-based approach. We have heard about examples of individual species led approaches like the New South Wales program. So I wanted to hear your feedback about how Victoria is tracking in terms of combining those two approaches and what would you recommend in terms of what Victoria needs to do more of to ensure that we maintain the survival of a number of threatened species.

Mr SULLIVAN: Okay. You have posed a couple of interesting questions there. First of all, yes, we do participate in the Saving our Species program, particularly for woodland birds and the critically endangered regent honeyeater and swift parrot. They do tend to be landscape-scale programs focused on species, and we blend philanthropic money along with government grants to leverage bigger conservation outcomes. I think it has been a successful formula for us in terms of bringing partners together and bringing more resources to the table to do conservation. Our approach to doing bird conservation is multifaceted. Whilst our approach is to collaborate at scale and work with partners, we focus on the bit we do well, which is the recovery of threatened species. I guess in that sort of landscape scale versus species argument we are very wary of just taking that regional planning approach. Particularly where you have endangered birds with really specialist needs, that sort of generalist approach is not going to help. It is like going to your GP with severe back issues or something like that. You need to combine conservation at scale with really specific specialist actions for the recovery of threatened species, and Grainne might want to give us some practical examples of that.

Dr MAGUIRE: Yes. I guess I could add that there are some threats that operate at the landscape scale that you can take that approach to and you can try and roll out landscape-scale mitigation practices, but at the end of the day you will still need to have really good indicators and they will often be single species and things like that that you will need to be measuring and monitoring to understand if it is even working. But even if you were to carry out something like fox control, which is a threat that impacts so many different species at a landscape scale and, you know, throw yourself into that, you still need to be looking at the timing of that control for a certain species about whether it is targeting their most vulnerable period et cetera—for example, their breeding period—and where you are putting your bait stations or which method you are using et cetera. You know, you are still going to have to look at the details, the finer details, of each species to understand whether these kinds of broadscale threat mitigations are going to work.

Dr RATNAM: Do you think that is happening in Victoria—that we are doing any bit of the latter in Victoria—or is it a gap for us here?

Dr MAGUIRE: I would say it is a bit of a gap. Often I see that some of these threat mitigation procedures seem to be the ones that are very attractive; they are considered simple to implement, and they will often opt for them. But we are not really measuring things that indicate whether it is working well, or we will inject some funds into it and then we will have to stop because the funding runs out and the problem will just go right back to before we started. Then we will have to invest the next set of resources and try and get back to where we were before. There is no continuity as well, which is a real issue. So I think there are lots of improvements we can make. A lot of it comes down to just those limited resources, and I guess also working at these really small scales often and not communicating and having a statewide approach—it still seems to be an issue.

Dr RATNAM: Thank you.

The CHAIR: Mr Meddick.

Mr MEDDICK: Thank you, Chair, and thank you both for your presentation today and for your submission. I have got two quick questions. First of all I just wanted to ask: in your opinion is Victoria meeting its obligations under the Ramsar treaty? And the second question is about: in your submission you are critical of that move by the federal government to devolve responsibility of environmental approvals to a state responsibility. I just want to unpack that one a little bit too, because there are many out in the community that say that the federal government should be actually stripped of that responsibility, and they point to approvals like the Adani mine in the Galilee Basin and the massive destruction that will cause to the environment up there and the loss of biodiversity. We have a federal government perhaps that is more inclined to approve developments or approve mining situations that will be detrimental to the environment and perhaps states are better positioned to look after those interests. So I just want to unpack that one, because there seems to be two schools of thought there. But first of all to the Ramsar, if you could.

Mr SULLIVAN: Grainne, do you want to handle that, given your experience with shorebirds?

Dr MAGUIRE: Okay. I think there was an inquiry into Ramsar site protection and whether it was meeting its obligations, a separate inquiry. But I guess we did have some concerns at the time in terms of many of our Ramsar sites are not even adequately monitored to even have alarm bells as to whether they are being properly managed or otherwise. Often we kind of lean heavily on the fact that, 'Okay, we've locked an area up; it's protected'. It might be a national park or a Ramsar site, so we kind of think, 'Well, it must be well protected', but of course the resources are not injected into properly managing the threats within those Ramsar sites, so often these will become a real issue. What happens on the edge of a Ramsar site will also threaten the integrity of that site. So there are still obvious issues with Ramsar protection and making sure that the habitat is genuinely protected and in good quality for the species that rely on it. There is still lots of work to do there.

Mr SULLIVAN: Grainne, in terms of the EPBC Act, I think in terms of state versus federal approvals, I recall one of our directors, Gerard Early, who was a former dep sec of the Department of Environment when the EPBC Act was first initiated, saying, 'Be careful what you wish for'. The EPBC reform was created to avoid the problems of states and fragmentation. Birds need protection wherever they are in Australia. Consistency of strong national laws was a principal device to overcome some of the shortcomings of state laws before the EPBC Act. So I can get you some more information on that. I was not around at the time, but I do know a little bit of the rationale behind creating the EPBC Act in the first place.

I think the importance for us is that we have gone through a thorough EPBC review. Professor Samuel has come up with a package of reforms that is built around an independent regulator with an independent cop on the beat with strong teeth and some strong national standards, and he has warned against the piecemeal approach and that we need a durable package of reform. As far as I am aware, all the conservation groups are right behind Professor Samuel's recommendations, with a few caveats. The business community as well, in our conversations with the Places You Love Alliance—the business community is sick of nature laws being kicked around like a political football, and they are looking for long-lasting, durable reform and certainty too. The problem is we are now facing a devolution Bill with watered-down standards and it is the opposite of what Graeme Samuel recommended, so it is really disappointing. We would love for Professor Samuel's recommendations to be implemented, and we would love the Victorian government to show some leadership and insist on those recommendations being implemented before it sets in the devolution Bill.

Mr MEDDICK: Thank you.

The CHAIR: Mr Hayes.

Mr HAYES: Thanks, Chair. Thank you both for your submission and giving evidence today. I just wanted to say I am glad to see you are taking a widespread approach in your submission, where you say:

A collapse in biodiversity will damage the interconnected ecosystems of the planet, putting humans at risk through the loss of food security, pollution of clean water and air and more extreme weather.

And you go on to say:

The drivers of decline largely result from the human population pressures; the need for resources to support agriculture, extractive industries and urban development.

In the light of that, in your opinion is it responsible for us to increase our population with no foreseen limit and have a plan to at least double Victoria's numbers over the next 25 years?

Mr SULLIVAN: Thank you for your question. I mean, you are absolutely right. The World Economic Forum's 2021 *Global Risks Report* ranks biodiversity loss as one of the top five risks to human beings. Given everything that has been happening in recent years, the potential for the loss of food security and clean water and pollution, we are really taking these things for granted, so it is really important that we address this urgently and that all governments sign up to the new biodiversity framework that is being negotiated hopefully later this year in China at the Convention on Biological Diversity. It is really important that we set really ambitious goals and we work out how to integrate biodiversity into agriculture and urban development and make those system changes that we need. As far as population declines, we are experts in bird conservation; I am not sure we are experts in demographics, so I cannot really comment on that. But I can agree that things need to change and if the population is growing we need to do things differently and more sustainably.

Mr HAYES: Thank you.

The CHAIR: Thank you.

Dr MAGUIRE: I might also add that something we really should invest in is better education and teaching good behaviours in the environment—you know, teaching people about how to respect the environment and use it sustainably and investing more in that. You can have high population numbers, but if you have got people behaving in a certain way, perhaps it can be sustainable.

The CHAIR: Thank you. Mr Grimley.

Mr GRIMLEY: Thank you, Chair, and thank you both for your submission. My question is in relation to invasive species of flora and fauna, and I would be interested to know your views on how these are impacting on Victoria's native birdlife and how they can be managed, those invasive species. How can they be controlled or eradicated in your view?

Mr SULLIVAN: Grainne deals with invasive species all the time.

Dr MAGUIRE: I do deal with them quite a lot. Look, it is a challenge. For example, in the coastal environment, affecting a lot of coastally dependent species, you have foxes as a major predator of ground-nesting birds et cetera, and you also have invasive weeds. A lot of these were actually deliberately introduced to the coast to manage erosion, but they are now a big problem because they are stopping dunes naturally moving and our coast having capacity to actually adapt to rising sea levels et cetera. So there are a lot of big pest issues to manage. There are also a lot of challenges, because for example to manage foxes you are now really limited in what you can use in areas that are used by the public or that have close residential areas et cetera. So you are almost constrained to the point of you cannot deliver any fox control properly in a lot of habitat of ground-nesting birds, just because of the use of those areas by the public and the risks to pets and things like that and then just the cost of maintaining that over time and also the limitations on what you can use in terms of bathing habits limitations and how effective it can be. We are not developing great new technologies to tackle things better in some of these areas, and things like weed removal—which is, sorry, a different topic—but on the coast it is tending to be avoided because of the implications of removing weeds that are keeping sand in place and limiting human movement in those environments. It opens up a whole other headache in terms of human management et cetera. It is often the interactions between threats as well that is another challenge. It can be very complex. Did I actually answer your question?

Mr GRIMLEY: Just to drill down on it just a little bit more, have BirdLife Australia done any research or evaluation or do they have any preference in terms of the most effective, safe way of pest management?

Dr MAGUIRE: Yes, I guess we have some indications in the coastal environment about some methods that are much more effective than others in terms of trapping things that are bait shy and use of soft-door traps or even a shooting program et cetera. There are ethical considerations as well that need to be taken into account.

Mr GRIMLEY: Okay. Thanks, Chair.

The CHAIR: Thank you. Dr Bach.

Dr BACH: Great. Thank you, Chair, and thanks both for coming along today. My understanding is that BirdLife Australia carries out waterfowl counts, and I have been interested to learn through the course of our inquiry something that I did not know before, which was that among other conservation activities, hunters, shooters, also engage in counting fowl. That got me thinking—and so I would like your response to this, please—about whether or not there are greater opportunities for working together, for collaboration, between groups such as yours and hunters and hunting groups.

Mr SULLIVAN: Yes, we do do waterbird counts. We have a big citizen science program. We have an app and a database called Birdata. We encourage volunteers to go out and survey birds, and we have been able to, if you look on our website, develop indices using not only our database but other databases to develop waterbird trends. And in terms of duck shooting, if that is what you are referring to, as an organisation we oppose duck shooting because of the long-term decline of waterbirds over decades and also community values. But we are a science-based organisation, so we do actively work with the GMA and we do talk to them and share our science and our information with them so that they can make I guess decisions on bag limits and seasons on the best available data, if that is what you are referring to.

Dr BACH: It is. Thank you very much.

The CHAIR: Ms Bath.

Ms BATH: Thanks, Chair. Thank you, BirdLife Australia, for appearing before us. Mr Sullivan, I was interested when you made the comment at the start that you have 220 000 either members or supporters—that is significant—which is really commendable. You also mentioned what you do well, and that is the recovery of threatened species. Could you elaborate specifically about, maybe, ecosystems and the restoration of them? And thinking about wetland habitat, are any of those 220 000 supporters involved in restoration and wetland habitat restoration specifically?

Mr SULLIVAN: We are obviously in the game of ecosystem restoration. Look, I have talked to the CEOs of other major conservation organisations. They realise that, you know, we cannot make a difference on our own, and there is a real appetite for organisations to collaborate at scale. We are looking now at a landscape-scale program in south-west Victoria with five or six other nature conservation organisations, and we all bring something different to the table, whether that is revegetation or specialist knowledge or covenanting or things like that, access to funds to mobilise resources. So that is the sort of approach we are taking to the landscape-scale ecosystem restoration.

In terms of wetlands themselves, we do a little bit of work on wetlands, but I do not think we are actually involved in any restoration programs of wetlands—yes, we are; we are doing a bit of work at Avalon, looking at improving the values of the intertidal mudflats there for migratory shorebirds and making some changes that are seeing an increase in abundance and diversity of migratory shorebirds there. Grainne may have some more information on that.

Dr MAGUIRE: Yes, and we have some South Australian projects as well. A lot of the time we act more in an advisory way, so we use a lot of the data that comes in or we carry out some specific research project to then inform land managers or NRMs or CMAs on the best approach to managing those wetlands and things like that. We have been heavily involved in the Adelaide bird sanctuary in the Gulf of St Vincent and other wetlands such as that.

Ms BATH: Thank you. Chair, one more: you mentioned at the start of your presentation the USA threatened species Act—I think I wrote it down—and the positive effect that it is having across the USA. Could you list the best three bits of it? This is a very big Act, I am sure; it is a big topic, and we have got limited time. You might like to take it on notice, but what is the USA doing well in that threatened species Act? What can we learn from that?

Mr SULLIVAN: I can give you some more information on notice, but I think from memory the two things that stand out are protection of critical habitat for threatened species, so making sure that that habitat is locked away and cannot be developed—

Ms BATH: And restoration of it?

Mr SULLIVAN: I will have to take that on notice. It was protection of the critical habitat and resourcing the recovery of the species. They were the two things that I recall, but I will take that on notice and give you some more information on that.

Ms BATH: Thank you.

The CHAIR: I might just ask a question. Does BirdLife Australia work with traditional owners to conserve birds and their habitats or do you provide more of an advisory service? Could you just unpack that a bit? What sort of work do you do and how do you do it, with traditional owners?

Mr SULLIVAN: Do you want to take that, Grainne?

Dr MAGUIRE: Yes. A fair bit of the work that we do—well, in the coastal environment—is that we work with traditional owners and Indigenous ranger groups. We do a lot of training of the rangers on bird ID and things like that, looking at which species are important to them and also learning what they have used those species to indicate in terms of environmental changes, but also passing on any kind of knowledge we have about indicator species and how to manage those species from what we have learned. We have kind of worked together and come up with some monitoring programs and some community education programs—for example, some of the Indigenous groups have helped us make signage and education programs on beach driving and its impacts on nesting birds and things like that. I guess it depends on the different areas and what the groups have an interest in and we kind of work with them and learn about their knowledge and work together to really tackle knowledge gaps and things like that.

The CHAIR: And just thinking of birds, of course birds feed on bugs and other things. So as part of your research do you also look at food sources for birds and how they might be impacted by decline or what is happening in the environment? Can you unpack that a bit as well?

Dr MAGUIRE: Definitely. I can answer that partly in that some of the work we do in the coastal environment is looking at beaches and understanding their characteristics and what that means to the invertebrate community, and understanding how things like wrack harvesting might impact the invertebrate availability or even compression of the sand through just human use or vehicle use or horse use and doing a lot of different research studies with uni students and university researchers to learn more about not only the impacts on the birds but their food sources. I also know that a lot of the regent honeyeater work, for example, was looking at the flowering rates and the impacts on flowering et cetera and what that meant to habitat use by the birds and things like that. Yes, we definitely look at the ecosystem as a whole and try and understand what the needs are for these species and how to conserve them properly.

The CHAIR: Great. Thank you. Mrs McArthur.

Mrs McARTHUR: Thank you, Chair. There is a conflict often between trying to protect a bird but then injuring other birds. For instance, in my electorate on a beach—Killarney—somebody in Parks Victoria thought it was a good idea to lay 1080 baits to get rid of the foxes that were perhaps impinging on the plovers and also what they did was fence off nesting areas, which provided dinner on a platter actually for the foxes, whereas for decades people riding horses and taking their dogs down there had ensured that the plover population was sustainable because of course the plovers are quite smart and they realised that where there is dog and horse manure there will not be foxes. So not only did we actually threaten the plovers and make it easier for the foxes to attack them but we also endangered other birdlife, especially carnivorous birds because they took the baits—let alone what was done to pets. So this conflict of interfering in the sort of habitat of birds disrupted the actual operation that was going quite well before we actually intervened to protect one bird species. Actually we made it worse for them and we also endangered others. How would you address that problem?

Dr MAGUIRE: I can actually speak to this directly because this is my area of expertise. The science actually does not support that information that you just provided on fencing attracting foxes and providing a meal to predators. In fact that was one of the initial hesitations about whether we could invest in these structures around vulnerable breeding sites to protect the camouflaged eggs and chicks and that was why we undertook a three-year study in terms of working out would it be more of a benefit than a risk and exploring the data quite

heavily across the Victorian coastline. The data strongly supports that fencing and signing breeding sites for the hooded plover actually mitigates heavily a lot of the human-based threats and increases the chance that these nests will successfully hatch and the chicks will fledge, and it does not increase predation risk by any means. We have explored that data heavily and we continue to evaluate that on an annual basis to ensure that we are not putting these birds at risk. In fact it is one of the most successful recovery strategies to date, which is really positive. These are quite simple actions that can have a great positive impact on improving the trajectory of this species. So we have been able to see the Victorian population reach numbers as low as 450 birds, but in more recent years they are up at about 700 and reoccupying sites that they were historically present at—so really positive signs that recovery is working.

In terms of the bait stations, I do not know the evidence of the carnivorous birds you speak of. I am not involved in that study or that kind of investigation, so I cannot really comment on that.

Mrs McARTHUR: So you are in favour of 1080 baits?

Dr MAGUIRE: To date I have not seen any evidence that there is any impact locally in that area. I mean, I would review the scientific evidence before I could comment further, but I was of the understanding that a lot of this has been investigated for years before being implemented and used as a strategy to tackle fox control.

Mrs McARTHUR: Okay. And also, if I can, 5 million hectares was burnt in the 2019–20 bushfires. What loss of bird species resulted from those fires? And would you also be able to quantify the loss of bird species caused by predatory introduced species into native forests and parks, like dogs, cats et cetera—foxes, rabbits, anything else that pops up.

Mr SULLIVAN: I mean, clearly the loss was devastating. I cannot recall them, but there were various estimates of numbers of birds that were actually killed during the devastating bushfires. We will maybe take that one on notice. We certainly know that it impacted 45 taxa, and I think I mentioned in the opening statement the Victorian species impacted. And there were some other birds like the common lyrebird, the superb lyrebird and the gang-gang cockatoo that were relatively common species and now need recovery actions to bring them back. I think—I am happy for Grainne to jump in here—our focus is the biggest threats to the species: making sure that birds have refuges and that we do not do prescribed burns in the habitat that is left that they are hanging on to and that we are not logging that habitat that they are clinging on to. In terms of cats, that is a wider scale problem. Grainne might have some more information on some of the specifics, but logging and prescribed burns where there are no assets at risk are our biggest priorities, I think, for the post-bushfire recovery.

Mrs McARTHUR: Okay. So just let us clarify that—you think prescribed burns and logging are greater dangers to bird species than raging bushfires and introduced vermin?

Mr SULLIVAN: Oh, I am not saying that. I thought you were talking about the post-recovery work rather than the actual bushfires.

Mrs McARTHUR: No, we need to prevent bushfires, surely.

Mr SULLIVAN: Absolutely, yes.

The CHAIR: All right. Thank you very much. I would just like to thank both of you for your contribution and presentation today. It has been really interesting.

Committee adjourned.