

The dingo dilemma: cull, contain or conserve: Plenary Session 2

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Plenary session 2.

Speakers: Mike Letnic; Ben Allen; Michael Ward; Katherine Moseby; Peter Fleming; and poster presenters Renee Brawata and Emma Spencer.

The following is a transcript of the plenary session edited for readability.

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MARTIN PREDAVEC (chair): Please join me in thanking all of our five speakers from this session. Now, once again, over to Paul for the next plenary session. So can we ask the five speakers to come to the front please.

PAUL WILLIS (MC): Thank you, Martin. Could I also request Renee Brawata and Emma Spencer to join us up the front. Renee and Emma have posters relevant to this session. Can you give us a two-minute summary of what your posters are about please.

EMMA SPENCER: My poster is about dingoes scavenging. I've been doing my PhD at the ecology lab at the University of Sydney on scavenging across Australia. I've been looking at really different environments: Simpson Desert, Blue Mountains and Kosciuszko National Park. We cover subalpine, temperate and desert biomes. The poster basically lets you know some of the observations we've made of scavenging: how long it takes for dingoes to arrive at carcasses, what they target, what they're eating on the carcasses, how long they stay around carcasses, and some of the interactions that they have with red foxes. Foxes tend to avoid feeding at sites where dingoes are also present, although foxes will still visit these sites.

RENEE BRAWATA: I'm from the ACT government currently, but formerly from the ANU. I'm one of the club that hasn't published their PhD. My work is from about 10 years ago. It was conducted in the Strzelecki Desert. I looked at sites either side of the Dingo Fence. I was lucky enough to capture data at the end of the millennium drought as well as during the boom period when the drought broke. I looked at dingoes', foxes' and cats' activity and activity in relation to some other species - macropods, small mammals and reptiles. I also looked at the dingo fence and how dingo management varied on both sides.

I looked at sites which had dingo baiting either side of the fence, as well as culling dingoes, as well as areas where dingoes were left alone. I found that dingoes were effective at keeping fox activity down, regardless of the innate productivity of the site, but also regardless of rainfall. That mechanism continued even through the boom period.

The other interesting thing that I found was that where dingoes were retained in the ecosystem, small mammals had higher baseline densities through the millennium drought and when the boom period came with the rain they really boomed. This was not seen on the other side of the dingo fence where we had sites with the same inherent productivity. I proposed a theory that I would like to see, with landscapes where dingoes are retained in our ecosystems, particularly in these boom/bust ecosystems, where they can maintain small prey over the long-term.

PAUL WILLIS: Thank you very much, Emma and Renee. I think the session that we've just had where we've been looking at the ecological impacts or otherwise of dingoes in the environment has provided a diversity of pictures, but rather than interrogate the panellists this morning, I would like to turn it over to questions from the audience. So, please, raise your hand. We will get a microphone to you. I would also add that I think that Kylie's curse from this morning that "it's complicated," was demonstrated amply in this session as well. Could you please identify yourself?

CARLO PACIONI: (Arthur Rylah Institute, Victoria.) What would be your recommendations strictly for wildlife conservation in contexts like Western Australia where there is a landscape with many predators - foxes and cats are a big problem.

KATHERINE MOSEBY: Cats are causing problems for all of those threatened species and particularly in Western Australia. It's very difficult when populations get to a critically low level, because at that stage any predation and any predator is an issue. Whether it's a dingo or a cat or a fox, if it's killing the declining species then it's a problem. Cats can climb trees and get away from dingoes whereas in a lot of desert areas, where they're open, it's a lot easier for dingoes to hunt cats.

MIKE LETNIC: I generally agree with Katherine in relation to critically endangered populations.

GREG CLANCY: I am from Coutts Crossing, heart of

the dingo country in New South Wales. My question is for Peter Fleming. We've been trying to eradicate dingoes ever since European settlement. We've poisoned them. We've shot them. We've trapped them. We've done everything to them. Has anyone studied the economic cost of trying to get rid of them rather than the economic cost of living with them and maybe compensating for the damage they do?

PETER FLEMING: The answer is yes to the question of has anyone looked at it? We have looked at some economic analysis and it's subject to a PhD at the moment. There are other locations around Australia with case studies on the economic benefits. There were places where we had effectively eradicated them, particularly in the sheep and wheat belt and basically out to Camerons Corner. Up until about 20 years ago it was very, very rare for wild dogs to be in, or dingoes of any sort, to be in that area. So sometimes we're successful but other times we don't achieve something beneficial for the livestock industry.

BEN ALLEN: It depends on what kind of stock you're running or what kind of place you're operating in, so the context makes a difference to the economics of dingo management. Some in the cattle country indicate that you're better off economically having dingoes and not controlling them. In terms of economics, it's not the same if you are in the sheep country, or if you are trying to manage for a different purpose where every little animal is worth a lot because there are so few of them. So there have been studies and some indicate that it goes one way, that it's better to control dogs for production, and others would indicate that it's best not to control dogs for production on economic terms. It all depends on the context.

JOHN LEMON: My question is to Ben. I have an interest in dingoes that goes back to Gungahlin in the 1970s with the CSIRO. I'm really curious about what happened to the dingoes on the islands after they had performed a really valuable biological function.

BEN ALLEN: They're still there and having a great time. When we last checked, they're still there.

MS So what are they eating?

BEN ALLEN: I don't know. We're not there. When we were there they were eating goats, small mammals and fruit and all of those things.

PAUL WILLIS: Is this a plea for more funding to go and find out what happened?

BEN ALLEN: The collars eventually run out and your data doesn't go on forever, but up until the point when we still had data on it, the dingoes, they were healthy and fat and well. The goats were gone. The vegetation was back. The small mammals were there. More other mammals

were being seen. That was the last point that we got data collection. So, at the last check dingoes are present and doing well on the island.

BARRY TRAILL: Generally across the states there's a level of pressure for all landholders to bait with some exceptions – graziers around Sydney, or business and conservation reasons – that don't bait, but they have legal pressures to bait. How do you deal with that situation where the business interests and the conservation interests of individual landholders are not looked after?

PETER FLEMING: It's very difficult and that comes down to the expectations of the local community. Obviously you're still going to have those conflicts where people have different values that they place on the animals, however, it all gets down to the general biosecurity duty.

You can get around conservation in certain areas if that's what you want to do, but you can also be involved in control programs. You don't have to be in the baiting program per se, to exhibit your generalised security duty. There are more ways than baiting to control any particular animal and there's a general dictum which is "don't rely on one method". So you can work on the sweeter methods that allow for potentially different values being placed on these animals. The difficulty is that they're mobile and so we will apply various types of management. That's where you really get into points of conflict.

BRONWYN FANCOURT: (University of New England). Mike, you said at the beginning of your talk you had four predictions. The second one I think was that you would see an increase in foxes and cats where dingoes were removed which, as you demonstrated, didn't happen.

Your third and your fourth predictions depended on that second one, in that you were expecting to see an increase in small mammals because you had a reduction in fox and cat predation. You did see the third and the fourth but clearly it wasn't due to the reduction in foxes and cats because you didn't see that. So, are you suggesting that the dingoes were responsible for that increase in small and medium animals through some other mechanism, or maybe it had nothing to do with dingoes? I'm just curious as to what the conclusion was from that work?

MIKE LETNIC: It was the medium and small mammals that would benefit because there would be more cover, and therefore reduced predation pressure from foxes and cats. I think we have that data showing there's more cover.

EVAN QUARTERMAIN: (Humane Society International). My question goes mostly to Mike's and Katherine's talks about quolls and dingo predation on them. I've just seen a lot of messaging from industry-affiliated groups lately about dingo and dog baiting being positive for quolls which may or may not have to

do with a push to intensify baiting in Victoria where the current EPBC Act licence is due to expire at the end of the year, which was restricted because of [spotted-tailed] quoll presence.

We're now seeing messaging coming out that it's actually good for quolls, which seems out of step with both of your presentations. I was wondering if there was any research that shows that baiting can be good for quolls.

MIKE LETNIC: I think those sort of things are always really difficult. My studies would be a little bit different from Katherine's in the sense that I'm thinking about the whole ecosystem responses in the study that described quolls, but within a group of species that benefited but that wasn't particularly looking at quolls.

It's conceivable that quolls might benefit, but overall, from the studies that I've been doing, that group of animals go down with baiting. I think that if you're going to research in a landscape in that very large-scale program it would be very difficult to think about one particular component. At the same time we're getting other increases and decreases.

KATHERINE MOSEBY: I wonder how much dingo control is taking out foxes, which might benefit the quolls. Certainly, fox and cat baiting can benefit quolls, so whether dingo baiting is having that effect on the foxes, which is benefiting the quolls, I'm not sure. But I did want to mention something from the landholder perspective too. I'm from South Australia where a lot of properties are now being bought for conservation so a lot of the dingo controls and a lot of the fencing are now not happening on a lot of those properties. So, where there's diversification in land use, it's getting harder and harder for people running sheep to stay in the sheep industry.

PETER FLEMING: It would probably be remiss if I didn't own up to being part of the research that was alluded to. Trent Forge is in the audience and he's been dealing with that too, and so has Guy Ballard who also is in the audience. As Katherine indicated, and I think it was Mike who indicated it as well, you can't separate dingo and fox control because the methods that you use, particularly baiting, take out both species. We do have evidence that quolls are not adversely affected by control programs for wild dogs and they may actually benefit from them.

PAUL WILLIS: Just skimming through the titles from the symposium 20 years ago, there doesn't seem to be a lot of the kind of detailed ecological studies that you guys have been doing. So, from the perspective of the ecological roles of the dingo, how far have we come in the last 20 years?

MIKE LETNIC: I think we've come a long, long way. I think Charlotte Mills will discuss some of her work on vegetation later this afternoon, but the effects that

dingoes have on the ecosystem are huge and, by using lots of different experiments, we've shown that you get these massive shifts in vegetation, in arid areas, where you get shrubs increasing dramatically where dingoes have been removed, and the loss of grasses. The loss of grasses is due to kangaroos. We think the increasing shrubs is probably more complicated, resulting from rodent effects on shrub seeds and rabbits' effects on seedlings. So, you get these very complicated effects and they even extend to soil nutrients. What we have found is that the soils in areas where dingoes are present were actually healthier than the soils in the areas where the dingoes are absent.

These are far reaching effects. It's like a rabbit hole. It just keeps going and going and going and we are finding more things. Another effect is that, given that dingoes eat centipedes, there's more centipedes where dingoes have been removed.

We've realised that this is a massive effect, but it's important to remember it's not in isolation. Across the world there are similar studies with wolves or sea otters, or cats or sharks. We're finding parallels all over the world that predators actually do control a lot of aspects of their ecosystems.

PAUL WILLIS: What effect has this body of research into the ecological roles of the dingo had on our management practices? Have they been modified in any way? Have there been any surprises that have come out of that research which indicate that there are inadequacies in the way that we manage dingoes?

MIKE LETNIC: From my perspective, the extent of the response has been extremely disappointing. Government agencies, especially in New South Wales, have actually shut up shop and they hear no evil

PAUL WILLIS: Now, there's a surprise.

MIKE LETNIC: and see no evil. So, there's nothing good that can come of dingoes at all. But, that said, there have been issues with the organisations and people working with the aim of taking advantage of dingoes, managing foxes and cats and kangaroos. There are shifts but really there's nothing widespread at a scale that I would like to see, but I'm pretty confident that you can't have dingoes and sheep. So those changes in practices are primarily in areas with cattle.

PAUL WILLIS: Peter, maybe you might want to comment. Has the legislation changed at all around this now that we actually have more information?

PETER FLEMING: Thanks Paul. I'm not allowed to comment.

PAUL WILLIS: It's okay. No-one is listening.

PAUL FLEMING: No-one is listening. I think that the legislation actually has tried to address the needs for conservation in some places and the need for control in other places. There are obviously conflicts that are very difficult, as Mike pointed out, and also then the issues of small stock. Small stock and dogs, whether they be dingoes or whatever, they just don't get on, so given that a lot of the economy and the lifestyles of the rural communities are dependent on sheep and goat production, I can't see anything changing in the near future.

BEN ALLEN: Mike is right. There's been a great improvement in our understanding of dingoes. There's certainly a lot more data and information that we have obtained in the last little while. It would be true to say that there's a general flavour that there's probably more dog control now than there has been in the last 50 years. So, Mike is right again in that that literature, the new information, has not resulted in a large change to the way that we do things. If anything, that literature has been associated with an increase in more dog control. The

question worth pondering is: why would we not see that management response, what we call may be a pro-dingo response if you like, to pro-dingo literature? Now, you might go on a thought on a conspiracy side, that it's all about big business or money or agriculture or whatever.

But you ask yourself, why would we not see a shift in management in response to this kind of information given that there is mixed and conflicting information? You could come out on the side of corruption or conspiracy or, whatever. The other side might be that the government is responding to a different type of information, or different qualities of information, or there's certain types of information more relevant to management than other types of information. I don't want to put the answer in anyone's head but ask yourself why would we not see that?

PAUL WILLIS: And I think that is a fabulous point to break for lunch. First of all, before you get up, a huge round of applause please for our presenters this morning. Have a wonderful lunch.

PHOTOGRAPHS



Martin Predavec, chair of session 2 of the dingo forum. (All the photos were taken by Dan Lunney.)



Mike Letnic.



Ben Allen.



Michael Ward.



Katherine Moseby.



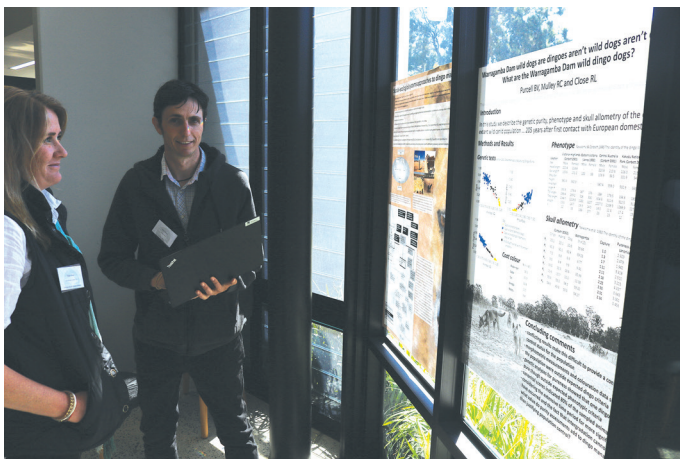
Peter Fleming.



Panel for plenary session 2, with audience in the Taronga Theatre. Peter Banks (standing on right) with roving microphone for questions from the audience.



Panel for plenary session 2. From left to right: Emma Spencer, Renee Brawata, Mike Letnic, Katherine Moseby, Ben Allen, Michael Ward, Peter Fleming, and panel chair Paul Willis.



Brad Purcell explaining his poster.