

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

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Plenary session I.

Speakers in the first session: Noel Webster, Oliver Costello and Dan Morgan; Chris Dickman; Kylie Cairns; Mathew Crowther; Melanie Fillios and Loukas Kounoulos; Stephen Jackson: poster presenter Peter Banks.

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

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PAT HUTCHINGS (chair): First of all, I would like to thank all of the speakers from this session. We now have an opportunity to ask questions, so will all the speakers from the session please come and sit in the front row and Paul Willis is going to coordinate this plenary. Now, please, when you ask a question, wait for one of the roving microphones. Also then, give your name and it will be recorded in the proceedings.

PAUL WILLIS (MC): Could I request Peter Banks to join us down the front for this discussion. The reason I am requesting Peter is that he has a poster relevant to this morning's session. Not only would I like Peter to join us, but I would like to kick off the plenary by asking you to give a short maybe one- or two-minute precis of exactly what your poster says.

PETER BANKS: I was looking at whether or not the dingo is a native species. I took the approach of looking at a way that it wouldn't be a native species by looking at what constitutes an alien species. I was very much taking an ecological perspective on this issue.

So why are we worried about alien species? It's because they have exaggerated impacts on the native fauna in places where the natives rely on surviving. Why do they have these exaggerated impacts? Well, because there's a mismatch with the local environment and often that's specific, for example, naivety towards an introduced predator. Those mismatches arise because the alien species haven't evolved in those locations with the local native species, which are naïve to the alien predator.

Using that logic, I looked at the evidence relating to the dingo. Has it evolved here? Yes. It would seem crazy to think that they hadn't evolved over 4,000 years when we see evolution in cane toads over a much shorter time with evidence to show that they are distinctive. Whether or not it's a distinct species or not I'll let others thrash out.

Is there evidence of naivety in the Australian fauna towards dingoes? No, there's not. We asked the Australian fauna did they recognise the dingoes as dangerous. They

certainly do, as you can see in Alex Carthey's work. Then we asked: are they having exaggerated impacts on wildlife? We saw some evidence of that from Mathew Crowther's talk. When we compare the magnitude of the impact of dingoes in Australia with that of alien species elsewhere in the world, we see that, using benchmarking, the impacts that they have are in alignment with what a native species has. These definitions fit with the dingo as being a native species in Australia.

Now, the problem is that a lot of this evidence is based on wildlife responses to hybrids or introgressed animals. We've seen responses of wildlife towards dogs and dog cues, so that might mean that dogs, whatever they might be, might be native. That's the logic that's in my poster.

PAUL WILLIS: Let's kick off the discussion here. I think for me this first session was perfectly summarised in Kylie Cairns' second slide entitled "It's complicated." What I wanted to drill down on here is: I just want a simple statement from anyone on the board. Do we have a concise and simple definition of what is and what is not a dingo? In other words, what are we going to be talking about today? Anyone on the panel that would like to field that question or are you all ducking for cover?

MATHEW CROWTHER: Kylie [Cairns] did show the genetic distinctiveness of dingoes but, as I pointed out, introgression is a common process amongst many species. We ask: ecologically and behaviourally, what is the thing that we're studying? Do you think it's introgression? Where are the genes from other populations, other species, in them? So, it depends on the context that you're talking about with species.

PAUL WILLIS: But from a functional perspective, is that good enough? What I mean is: if we're going to come up with management plans for dingoes versus hybrids versus wild dogs, we can't base that on running around taking a swab of every animal that's out there to figure out whether it's a dingo or not. Can we get a working definition?

MATHEW CROWTHER: Well, certainly we can get a definition. I think the best people to talk about it are the Aboriginal people in Australia. They have a very sensible definition of dingoes and it doesn't matter about introgression. There's no need to do DNA swabs. Sometimes it is really good to listen. Apparently we haven't done a lot of listening in our past and it's about time we did.

PAUL WILLIS: Stephen, could I come to you there on that point. Do you think that we've got a suitable definition of a dingo?

STEPHEN JACKSON: My view historically has been if it looks like a dingo, it's a dingo.

PAUL WILLIS: But you just put up pictures of a whole range of things that looked like dingoes, and only one of them was a dingo.

STEPHEN JACKSON: Exactly, and that's the difference between what you call the morphology. I didn't provide the slide, but basically there's a difference between what you see as a morphologically-looking dingo and a genetic dingo. So that slide basically says, "Here's all these morphologically-looking dingoes and here's the one that genetically says it's a dingo." So, as I said, it's my personal view – and obviously it's quite different from others. So there might be some degree of admixture or outbreeding. I think, to a reasonable mind, if it looks like one it probably is one.

KYLIE CAIRNS: It's a really complex question because we have genetics now that we can use to distinguish between dingoes, like pure dingoes and varying degrees of dingo, whether it's got more hybridisation or less hybridisation, but when we're thinking about an animal that's living in the wild, I think that's got to be our main definition. Obviously, it's not going to be workable for a person going out and swabbing every single animal and then making a decision with the animal in the trap and wondering, "Are we going to get a result?"

I think that one thing that we can use to get towards that point is by asking: what is the functional role of the dingo in the wild and is that animal performing that functional role or not? From Danielle Stephens' work, it's pretty well documented that if it's living in the wild that it's probably mostly dingo, or at least more than half.

PAUL WILLIS: At least mostly. Okay. That's good.

KYLIE CAIRNS: It's not a large dog. I don't even know what a large dog is unless we're talking about an African wild dog, but "wild dog" seems to be used as a catch-all phrase for dingoes, hybrids and feral domestic dogs.

MELANIE FILLIOS: This is something that Kylie showed in her slide. She mentioned one of the things we want to

point out is that a lot of genetic work has been done with the modern dingo. We've been able to test archaeological dingoes to look at what is a dingo. It comes back to: do we want to define this genetically, or do we want to define this culturally and, as you seem to suggest, their function in the wild? It seems to be that, at the moment, it's not feasible to define them genetically because you're not going to swab every single dog that you see.

KYLIE CAIRNS: Yes. Well, I mean, we can define them

MELANIE FILLIOS: Genetically.

KYLIE CAIRNS: But, is that workable in terms of landscape management? Probably not. We can monitor populations, and identify populations that have a higher degree of dingo ancestry, or the ones that have a lower degree of dingo ancestry, which might have implications for how you want to conserve populations. One of the fundamental reasons why the dingo is so important in Australia is its ecological role and we should be more strongly focusing on that in terms of what is a dingo in the wild.

OLIVER COSTELLO: I'm not an expert on these things, and I don't speak for all of the Aboriginal people, but from my cultural perspective, how I define a dingo is more about whether that animal has a cultural connection to the place where it is, so it has a cultural and historical relationship, and it also follows its own law or follows the dingo law. It behaves like a dingo because it's been taught the dingo law and it does what it's supposed to do.

That's the cultural perspective. I don't look like an Aboriginal person, but I feel like one and I hope I act like one. That's drawing on that sense of responsibility to follow the cultural practices that are important to me, and to me that's the same with dingoes. If it's behaving like a dingo, it looks like a dingo and it's doing what it does, and it's part of the system that relates to it, it's a dingo.

Those relationships can shift and change through landscapes. We've got places that have dingo places. That's historically woven into our cultural identity and practice. It's hard for us to conceive the idea that it doesn't belong here. Well, it clearly does.

PAUL WILLIS: Melanie, if I remember correctly, and I'm not misquoting you, you actually said, "Of course it's native because it was here before Europeans arrived," but then you went on and Peter elaborated on the theme of should we consider the dingo to be native because it's obvious that it was introduced, about 4,000 or 5,000 years ago and that introduction was probably by human agency? So, should that be brought into the mix when we're talking about dingoes? Should we really think about them as native animals?

MELANIE FILLIOS: I would vote yes, as most people would have guessed. That's because, from an ecological perspective, they have evolved here to fill the niche that was present. I believe that's what was left by other predators, which are no longer here. I'm arguing ecologically they now fill a niche that was left unoccupied. Do we have some marker of how long a species needs to be somewhere before we consider it native? I think that that's really arguing on semantics. Introduced at some point but 10,000, 20,000, 5,000 or 200; what is it? Can anybody quantify that?

PAUL WILLIS: Down to Peter because your paper is relevant to this.

PETER BANKS: We don't need to really. All of these dates are arbitrary, so our approach was to ask the fauna what do they reckon. Do they see dingoes as having exaggerated impacts, or are they having impacts like other native species? The answer would seem to be they perceive dingoes as a native, so then there's the answer, except in Tasmania. I think that Tasmania has forgotten the dingo, so they're not native there.

STEPHEN JACKSON: I have a different viewpoint. The fact that it's a dingo and has been brought here by humans really undermines whether it's native. The other argument that it is native because it's fulfilled an ecological role I think just makes no sense. For example, since European settlement there's horses, there's deer, there's pigs and there's you name it. Each of those new species has now revealed an ecological role. Does that now mean that because they have an ecological role, that feral pigs now are a native species? Is the horse or the deer or whatever now a native?

So, I think you've got to look at the concept of: does the dingo fill an ecological role? You'd be sure it does, but you've got to look at it in the context of other things that also now fill an ecological role. You've got to look at the bigger picture.

PAUL WILLIS: Are you fidgeting Peter, did you want to add something there?

PETER BANKS: It's not just an ecological role. It's that they're not having exaggerated impacts. Alien species have exaggerated impacts. They do things that are mismatched to their environment. They consume species that can't replace themselves and wipe them out. When things are right in the new system the impact goes away. The native species evolve to cope with them and the alien species evolve with the local species. These more recent arrivals, like pigs and deer, they're in the early phase. They're probably still having exaggerated impacts but, over time, in 10,000 years, we will think that they're

native too. But the things that they might wipe out meanwhile is a discomforting thought, but there it is.

PAUL WILLIS: Okay. Do we have any questions from the audience?

HANS ERKEN: I'm not affiliated with anybody in the environment and I live in a very urban zone in the Sunshine Coast of the Queensland hinterland near the town of Maleny. I've had dingoes visiting there for a number of years until the council wiped them all out. I've taken a passionate interest in them ever since.

I have a problem with the term "wild dog" that is being used in conjunction with the management of dingoes. I can't find evidence of domestic dogs being able to go wild; in other words, raise a litter and not in conjunction with support by human beings and not hybridised. So, I see categories of dingoes, dingo hybrids and this wild dog thing should be feral dogs. There are no dingoes in Tasmania yet there are significant problems with feral dogs causing damage to the stock. There's distinct management differences. You can regulate the laws for people to be more responsible with their dogs.

PAUL WILLIS: So, the question is, should we be talking about wild dogs or feral dogs? Is there any benefit in distinguishing between the two?

KYLIE CAIRNS: Yes, for conservation reasons. I think that what your question is getting to is why do we seem to consider domestic dogs and dingoes to be interchangeable when they clearly are distinctive. That comes down to the problem that we don't really have any knowledge of any populations of domestic dogs that are capable of living in the wild, but we do have dingoes. That's the distinguishing feature between them and that's one of the reasons why some authors have said that we think that dingoes should be considered a distinct species because clearly there is something different about dingoes that allows them to exist in the wild compared to domestic dogs. It doesn't make sense to say that they are the same if they're different and not interchangeable.

So if you were able to take domestic dogs and put them out into the wild and they started to fulfil an ecological function like the dingo, then fair enough, they are the same, but that doesn't seem to be the case here. We don't see feral dogs. We don't see significant populations of wild dogs or feral dogs living in Australia. To be living in the wild we generally have to have at least 50 per cent or more dingo ancestry to give it the capability for living in the wild.

PAUL WILLIS: Interesting. You're calling time on us. Could I please get a huge round of applause for our speakers this morning.

PHOTOGRAPHS



Oliver Costello, Noel Webster and Dan Morgan. All the photos were taken by Dan Lunney.



Kylie Cairns at the lectern, with Thomas Newsome on the right.



From the left, Mathew Crowther, Peggy Eby, Thomas Newsome and Pat Hutchings.

Mathew Crowther



From left, Loukas Koungoulos and Melanie Fillios (presenting).





Loukas Koungoulos.



Stephen Jackson, with RZS councillor Peggy Eby organising the computer presentation.

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Panel of the presenters in the first plenary session, from left: Peter Banks, Mathew Crowther, Kylie Cairns, Melanie Fillios, Loukas Koungoulos, Stephen Jackson, Chris Dickman and Paul Willis (standing). Photo shows location: Taronga Theatre.



Peter Banks' poster being absorbed by forum attendees.