From:	Kylie Cairns
То:	epc council
Cc:	<u>ecosystems</u>
Subject:	Re: Transcript: Inquiry into Ecosystem Decline in Victoria - 23 February 2021
Date:	Friday, 26 March 2021 9:16:16 AM
Attachments:	Cairns wilddog mythAM20055.pdf
	<u>Newsome-1983-The-feeding-ecology-of-the-dingos.pdf</u>
	Doherty-2019-Continental-patterns-in-the-diet-of.pdf
	Robertshaw-1985-The-ecology-of-the-dingo-in-north-e.pdf
	ritchie-interspecificandgeographic-2015.pdf
	Cairns pelage 10.1111 jzo.12875.pdf

Hello Cat,

I have looked at the transcript and can find no corrections needed.

Dingo identity/purity

I have a paper published today (26th March 2021) which goes to the point about dingo ancestry across Australia, and in Victoria. This work is based on over 5000 genetic testing results and collates data from multiple published (mine and other authors) and unpublished work. I also discussed in my testimony a recent paper of mine about coat colour that provides information about ancestry in Victoria as well. Both of these papers are attached and the citations are as follows:

Cairns, K.M., Crowther, M.S., Nesbitt, B., and Letnic, M. (2021) The myth of wild dogs in Australia: are there any out there? *Australian Mammalogy*. <u>https://doi.org/10.1071/AM20055</u>

Cairns, K.M., Newman, K.D., Crowther, M.S., and Letnic, M. (2021) Pelage variation in dingoes across southeastern Australia: implications for conservation and management. *Journal of Zoology*. <u>https://doi.org/10.1111/jzo.12875</u>

I have recently performed DNA testing on several young dingoes rescued from the wild in Victoria, all of which were pure dingoes, these are all currently housed at the Dingo Discovery Sanctuary and Research Centre (Melbourne) and the results have been publicly released. These results provide evidence that new genetic testing may provide further detail about the identity of Victorian dingoes and relies on over 200,000 genetic markers compared to traditional dingo genetic testing which uses only 23 markers. I am aware that there is additional genetic testing data in the hands of DELWP which is not publicly available, these would mostly be based on the older technique (23 genetic markers).

Diet of dingoes

Yes, studies on the diet of dingoes (either pure or with dog ancestry) demonstrate that largemedium marsupials are their common prey. They are generalist predators so may prey switch depending on availability, environmental conditions etc. Most studies have observed that whilst sheep do appear in the diet of dingoes (scats or stomach contents), they are not the dominant prey item. This is corroborated by the data that DELWP/DEDJTR hold in relation to livestock loss in Victoria showing less than 1500 sheep lost per year due to predation by dingoes out of a total sheep population in the state of over 14 million (based on data released under FOI to the Association for Conservation of Australian Dingoes Incorporated).

The following references provide further data on the diet of dingoes in Victoria (or southeastern Australia):

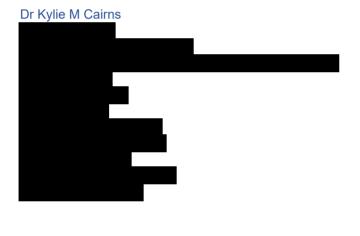
Newsome AE, Corbett LK, Catling PC Burt RJ (1983) The Feeding Ecology of the Dingo. 1. Stomach Contents From Trapping in South-Eastern Australia, and the Non-Target Wildlife Also Caught in Dingo Traps.. Wildlife Research 10, 477-486. <u>https://doi.org/10.1071/WR9830477</u>

Robertshaw JD Harden RH (1985) The Ecology of the Dingo in North-Eastern New South Wales. 2. Diet.. Wildlife Research 12, 39-50. <u>https://doi.org/10.1071/WR9850039</u>

Davis NE, Forsyth DM, Triggs B, Pascoe C, Benshemesh J, et al. (2015) Interspecific and Geographic Variation in the Diets of Sympatric Carnivores: Dingoes/Wild Dogs and Red Foxes in South-Eastern Australia. PLOS ONE 10(3): e0120975. https://doi.org/10.1371/journal.pone.0120975

Doherty, T.S., Davis, N.E., Dickman, C.R., Forsyth, D.M., Letnic, M., et al. (2019), Continental patterns in the diet of a top predator: Australia's dingo. Mammal Review, 49: 31-44. <u>https://doi.org/10.1111/mam.12139</u>

Kylie



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