**From:** Catherine Tiplady

Sent: Wednesday, 10 January 2024 9:48 PM

To: Animal Welfare

**Subject:** CM: Re: Inquiry into the proposed aerial shooting of brumbies in Kosciuszko

National Park – Post-hearing responses – Monday 18 December 2023

Dear Kara,

Please find attached responses below:

The Hon. ROBERT BORSAK: But, Dr Tiplady, that has been done in that park and other parks in New South Wales for decades and decades, including the more than 20 years since aerial or any sort of culling of Monday 18 December 2023 Legislative Council - UNCORRECTED Page 28 ANIMAL WELFARE COMMITTEE horses was banned, and we've ended up in this situation. How can you give evidence like that and assert that it would actually work, especially in these circumstances? Where is your evidence that has worked in other environments—for example, in the Northern Territory, where they have a huge wild horse program?

RESPONSE: This is not actually true - passive trapping has been variably used in different parts of Australia, but not always consistently. However, reproductive control has not been attempted at all in any wild horse populations in Australia. There is evidence that some forms of reproductive control has been effective in some wild horse populations in the US. There is no evidence that this has been effective in Australia because it has never been tried. Furthermore, there are new modes of reproductive control being developed all the time. Typically wild horse reproductive control in the US has been through the use of PZP vaccine as an immunocontraception, but there are newer methods of reproductive control that have been developed including longer lasting PZP and GnRH vaccines, and also intrauterine devices. It is fair to say that with the current situation, such methods could not achieve the dramatic reduction in the population over the time period being proposed, however unless trials with reproductive control happen alongside other current management methods then the population will very quickly rebound again since reproductive rates increase after large scale culls.

Is there a 'foaling season' for brumbies – if so, when does this occur? What conditions allow for reproduction – is it warmer weather and other aspects? Please detail.

RESPONSE: The oestrous cycle of mares is determined predominantly by daylight length thus they cycle typically throughout late spring, summer and early autumn. The gestation period is approximately 11 months and therefore most foals will be born between September and March. Thus the foaling season can be quite prolonged, although typically the majority of foals in KNP will usually be born between November and February. Conception is also dependent on the nutritional status of mares, and so if mares are in poor condition coming out of winter, they may not conceive until late summer or early autumn when their nutritional status is likely to be better. Occasionally mares will also continue to cycle into winter, and if so this can result in foals being born in later autumn.

2. Fertility control has been an effective method used in the USA for the past 40 years and at least 10 years in the UK. Do you think that the Government should be commencing trials for fertility controls for brumbies in NSW – and if so, what do you see as the potential benefits?

RESPONSE: Trials definitely need to be commenced. There are different challenges in the NSW populations of wild horses compared to those in the US and UK where fertility control has been successful and this has been a reason for not instigating fertility control in NSW. However, this is a critical area for progress to be made in since culling without some form of reproductive control will simply result in population numbers rising rapidly again. I prefer to refer to reproductive control rather than fertility control, since there are other methods of managing reproduction other than targeting fertility. For example only recently an intrauterine device has been developed for use in feral horses in the US, and this could be a more feasible option for reproductive control in some NSW populations than immunocontraception.

Kind regards,

Dr Catherine Tiplady Veterinarian