



Potential of reproductive control tools to effectively manage wild horses in Kosciuszko National Park (KNP)

Introduction

There has been increasing interest in the potential for reproductive control technologies to effectively manage free-roaming horses in both Australia and overseas with a number of ongoing studies conducted in the US (Kane 2018; Bechert et al 2022). The 2020 Kosciuszko National Park (KNP) Wild Horse Scientific Advisory Panel (SAP) Report (the SAP Report) acknowledged that reproductive control alone will not reduce the horse population substantially in the short-medium term but that once populations are reduced to a lower level, there may be potential for reproductive control to maintain populations at appropriate levels, thus negating the need for ongoing reliance of lethal control methods in some locations.

Studies

The RSPCA is not aware of any relevant studies in Australia nor of any reproductive control products which are currently registered for commercial use in wild horses in Australia. However, the SAP Report reviewed different reproduction control options and recommended that applications be made to the Australian Pesticides and Veterinary Medicines (APVMA) for approval to import and use two different immunocontraceptives (Porcine Zona Pellucida [PZP] and GonaCon®). Hobbs and Hind (2018) state that GonaCon® could be considered a potential control tool in specific circumstances, rather than PZP, which may pose some risks to the Australian pig industry. Other US studies have found that intrauterine devices may be useful as a control tool (Gradil et al 2019; Hoopes et al 2021) and the SAP Report recommended trialling of these devices, although Hobbs and Hinds (2018) did not consider these appropriate. The SAP Report also acknowledges the need to monitor the work underway in the US examining a new oocyte growth factor immunocontraceptive in terms of potential use in Australia.

Conclusions

Based on published studies, reproductive control options may offer potential, as niche tools to help manage wild horses in KNP. However, Australian studies would need to be conducted to determine suitability.

References:

Bechert US, Turner JW, Baker DL et al (2022) Fertility control options for management of free-roaming horse populations. *Human-Wildlife Interactions*, 16(2):179-216.

Gradil CM, Uricchio CK, Schwarz A (2019) Self-assembling intrauterine device (Upod) modulation of the reproductive cycle in mares. *Journal of Equine Veterinary Science* 83, 102690.

Hobbs R, Hinds L (2018) Could current fertility control methods be effective for landscape-scale management of populations of wild horses (*Equus caballus*) in Australia? *Wildlife Research*, 45:195-207.

Hoopes KH, Gradil CM, Vanderwall DK et al (2021) Preliminary study of the contraceptive effect of a self-assembling intrauterine device (iUODs) in mares maintained in a paddock with a fertile stallion. *Animal Reproduction Science*, 235, 106881.

Kane A J (2018) A review of contemporary contraceptives and sterilization techniques for feral horses. *Human-Wildlife Interactions*, 12(1), 12.

SAP (2020) [Kosciuszko Wild Horse Scientific Advisory Panel final report | NSW Environment and Heritage](#)

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