

MANAGEMENT OF THE DINGO IN THE ACT

Issues and future options

Don Fletcher, Environment subcommittee, NPAACT Inc.

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Dingo, Wild Dog and Feral Dog - what are they?

Recently published national genetic research extends nationally what ACT government scientists have long known for the ACT region, that the wild-living populations of Dog-like animals are Dingo populations (Cairns et al. 2023). Previously referred to as 'Wild Dogs', 'Feral Dogs' or 'Dingoes and other Wild Dogs', and *Canis lupus dingo* or *Canis familiaris dingo*, in fact these animals have very little Domestic Dog in their genome, in spite of their contrasting appearance to the popular image of what a Dingo looks like. Based on the research, they are best known as Dingoes, *Canis dingo*. Also, there are no populations of Feral Dogs here. The recent DNA research, based on much improved technology, showed that even the ACT Government understanding of the animals as 'Dingoes with a little Dog in them' needed revision because there has been even less hybridisation between Dingoes and Dogs than was thought eleven years ago when the *ACT Vertebrate Pest Strategy 2012-2022* was published, saying:

Genetic testing of a large number of animals has shown that there are no Feral Dogs (domestic dogs gone wild) in the ACT region (A. Wilton unpublished data). The DNA evidence suggests that wild dog populations can best be described as being dingoes with a small proportion of domesticated dog genes. Pure Dingoes cannot be distinguished from part dingoes in the field, so they are managed as a single entity (i.e., as wild dogs). Wild dogs may perform an important role as higher order predators in natural ecosystems (Glen et al. 2007), irrespective of their genetic makeup or coat colour. The ACT Government therefore aims to maintain viable populations of wild dogs in conservation areas. However, livestock are killed and severely injured by wild dogs where their habitat is adjacent to or overlaps with rural properties. (ACT Government undated).

Therefore, in this document, by 'Dingo' we mean all members of all wild-living populations of Dogs in the ACT region. See Cairns *et al.* 2023 for more detail and the most thorough national study to date. The authors state that, based on the DNA, 'there are at least four wild dingo populations and a separate captive dingo population in Australia'; and 'the presence of dog ancestry in wild dingoes is much less common than previously hypothesised by microsatellite DNA testing'; and 'diverse coat colours may represent standing ancestral variation or perhaps local adaption'.

There is no longer any justification for the terms 'Wild Dog' and 'Feral Dog' in relation to either the Dog populations in national parks and elsewhere, or the control operations carried out to manage

their impacts on sheep growing businesses. Also, the situation is simpler than previously described by users of the redundant terminology. Dingoes are simply native animals which have both harmful and beneficial effects, depending on the location and context. In that way they are the same as Eastern Grey Kangaroos, i.e., supplying vital ecosystem services important for biodiversity conservation in many locations and circumstances, but also capable of causing impacts of major concern in others. Dingoes and Eastern Grey Kangaroos also share a high potential for their management to generate political controversy.

Current management practice is based on the right strategy

Our observations while bushwalking of ACT Dingo management actions include seeing hundreds of bait stations at 0.5 km intervals along certain roads and encounters with contractors or staff doing Dingo management. Occasionally we have even seen Dingoes struggling in soft-jaw traps. These observations have been supplemented or explained by our discussions with PCS staff and contractors over many years. It is evident that in practice the Dingo has dual status in the ACT, as it should. It is protected from control in some places and dealt with vigorously in others. We are pleased that onground practice is based on more ecologically informed and rational thinking than the current legal status of the Dingo!

Current management practice complies in principle with the recommendation in a scientific paper about how to manage the type of wild species which can interbreed with domestic animals (Daniels and Corbett 2003). The premise of the paper, that Dogs and Dingoes readily interbreed, is now known to be false, and therefore its recommendations should be reviewed. We suspect that the recommendation itself is probably still appropriate, but for different reasons. The recommendation is to implement zones of two kinds, one in which the species is totally protected and another in which it and its domesticated relatives are heavily controlled, to prevent or minimise movement of either the wild or the domestic taxon in either direction.

We surmise that more recent experience overseas, including with wolves in the USA, could potentially provide improvements to the current ACT approach and may have some more nuanced and advanced thinking to offer, as well as better use of technology, but our main comment is that it is commendable that the current strategy has followed the science in preference to the legal declaration of the Dingo as a pest.

The current legal position is inappropriate

A 2021 declaration under the ACT *Pest Plants and Animals Act* (2005) includes *'Canis lupus* Wild Dingo/Wild Dog' as a pest animal. Due to that listing, all that is now required for Dingo control to become mandatory everywhere in the ACT is a *Pest Animal Management Plan*.

History shows that Dingo politics in most states and the ACT is volatile and can generate management proposals that are unexpected, or even irrational. Compared to government, the NPA has a long memory, including the occasion, during a prolonged episode of sheep killing which had attracted much media attention, when the Conservator himself proposed a Wild Dog management plan whose major action was aerial baiting over the entirety of Namadgi National Park! Due to the wisdom of the Environment Minister at the time, Gary Humphries, a potential ecological disaster was averted. He called a meeting with local community groups, including the NPA, to announce this. Thus, the minister preserved the *status quo* of Dingo management, even though at the time an unprecedented number of sheep was being killed.

The lessons from that 'near miss' event are that because injured sheep, and farmer welfare are both highly emotive topics, it is desirable:

- for decisions about wildlife management and animal welfare to be based on evidence;
- for decisions about the protection of grazing businesses to be made in a planned way outside the potentially heated politics of crisis; and
- to enshrine important biodiversity protection principles and requirements in legislation and statutory documents as far as reasonable and possible.

Why act now?

There is potential for two kinds of Dingo management controversy – a crisis arising from sheep killing and a controversy over the use of compound 1080. The latter has not been seen before in the ACT, but experience elsewhere, especially in Tasmania and New Zealand, shows that there is potential for that type of political controversy, and social media is indicating the potential for the recent genetic research results to be used in attempts to ban compound 1080.

The meeting in Gary Humphries' office took place more than 25 years ago, and since then much has been learned about the role and importance of top predators; how to manage native predators that have the potential to kill livestock or humans, such as Wolverines, various Bear species, Lions, Mountain Lions, Wolves and Dingoes; and how to manage wildlife management conflicts. It seems sensible to not only change the legal status of the species but also to review ACT Dingo management in a rational way in the absence of a political crisis over a sheep killing and before there is pressure from the Dingo lobby, based on the recent DNA results, to ban the use of compound 1080.

And do what exactly?

One legal solution which may satisfy all parties would be to declare the Dingo as a 'controlled native species' under the ACT *Nature Conservation Act* (2014) and prepare a succinct Dingo management plan (as legally required by the declaration) which contains the most important policies but leaves room for change of tactics and locations, in recognition that scientific understanding is advancing relatively rapidly in this area. There also should be a review of current practice to explore obvious issues, build stakeholder understanding, and check for technological updates in the USA and elsewhere. We suggest the following actions to be desirable:

- 1. Remove the Dingo from the schedule on which it is listed under the ACT *Pest Plants and Animals Act* (2005);
- 2. Declare the Dingo as a Controlled Native Species under the ACT Nature Conservation Act (2014);
- 3. Review the management of the Dingo in the ACT in detail, including whether all the 1080-baited areas in Namadgi National Park can be justified, and what control methods should be used where;
- 4. Find ways to encourage landholder uptake of 'on-farm' Dingo management methods such as use of livestock guardian animals;
- 5. Encourage NSW Local Land Services (LLS) agencies to do their share of work adjoining Namadgi; and
- 6. Encourage applied ecology research which will assist future management.

The review (Action 3) could consider questions like:

- Are all the baited areas in the ACT conservation estate justified?
- How can ongoing control of a native species and ongoing use of 1080 be protected from activists?
- Should PAPP be used in baits in preference to 1080?
- Is education of graziers, doggers and tourists needed, regarding better control of owned
 Dogs to minimise the rate of hybridisation?

REFERENCES

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