

INQUIRY INTO DINGOES IN NATIONAL PARKS IN NEW SOUTH WALES

Organisation: Association for Conservation of Australian Dingoes Inc.

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Submission by

Association for Conservation of Australian Dingoes Inc.

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Preamble

AFCAD Inc. welcomes the opportunity to contribute to this inquiry, with the hope and expectation that the level of protection given to dingoes in NSW national parks will be significantly improved. A primary function of national parks to provide refuge to native fauna and to preserve the ecological integrity upon which this fauna depends.

AFCAD Inc. brings a wealth of knowledge and experience regarding the political and other challenges facing dingo conservation to this submission, much of it from its involvement in dingo conservation in Victoria. As many of core issues and challenges in the two jurisdictions are essentially the same, discussion below pertaining to the treatment of dingo populations in Victoria, including in its national parks, is directly relevant to the NSW inquiry.

The information presented relates to three of the terms of reference guiding the current inquiry:

- (a) the genetic status of dingoes, the distinction between dingoes and dogs and recent research into the genetic profile of NSW dingoes
- (b) the legislative, regulatory and policy frameworks governing the management of dingoes in New South Wales in national parks
- ...
- (e) the impact of current government policies and programs for the management of dingoes in national parks

The distinction between dingoes and domestic dogs

Much of the renewed discussion about the distinction between dingoes and domestic dogs has centred upon the findings of genetic research over the past 5 years or so. Relatively crude genetic research prior to this had concluded that pure dingoes were rare, with dingoes carrying some degree of domestic dog ancestry predominating. More recent research, using much more advanced genetic methodologies, and contrary to common perceptions, subsequently found that the majority of dingoes were pure, and that dingo-domestic dog hybrids were predominantly dingo in genetic makeup (Cairns et al., 2023). One research project (Weeks et al. 2025), commissioned by the Victorian government found no evidence of dingo hybridisation at all. Even more recent genetic research found evidence of deep-ancestry hybridisation between dingoes and domestic dogs, having peak occurrence in the 1950s and 1960s, a period of intensive lethal control and the expansion of human populations in rural areas, including into dingo habitat (Scarsbrook et al. 2025; Ravishankar et al., 2026). Whereas the research by Cairns et al. (2023) and Weeks et al. (2025) had focussed on exploring evidence for dingo hybridisation over approximately the last 8 to 10 generations, the most recent genetic studies searched for deeper ancestral introgression.

Although there has not yet been sufficient time for a scientific peer-reviewed response to the work of Scarsbrook et al. and Ravishankar et al., an immediate question for government authorities relates to how to define the dingo (*vis-à-vis* hybridisation) for conservation purposes. This question relates, in turn, to the relevance of dingo hybridisation for dingo ecological function, including in NSW national parks.

The scientific consensus around these issues is clear. This consensus was recently expressed in a joint statement by leading scientific experts to Victorian government ministers. The scientists, including one of the authors of the study which identified deeper historical genetic introgression, stated that, "...although recent scientific papers differed "...in their application of analytical methods and genetic data types, all papers were broadly consistent in showing:

- **Dingoes are genetically distinct from domestic dogs** (12-16).
- Dingoes have been part of Australian ecosystems for thousands of years (16-19).
- There are at least two regional dingo lineages (15, 16); with evidence of up to 8 distinct sub-populations (12-14).
- First generation dingo-dog hybrids make up less than 0.5% of the wild canine population (20-22).
- There are no established free-living feral dog populations in Australia (20-22).
- **Dog ancestry in wild dingo populations is limited** (12-16).
- **Dog ancestry in wild dingo populations is largely historical**, with the bulk occurring in the 1950s to the 1980s (12-15).
- **The term "wild dog" is not appropriate for wild canine populations in Australia**, it is misleading from a genetics perspective and deeply offensive to many First Nations peoples. These populations are overwhelmingly composed of dingoes, whether or not they carry historical dog ancestry (12-15) (Emphasis added).

(Expert joint statement, May 26, 2026)

The responsible conclusion to be drawn from recent genetic research is clear:

... **there is overwhelming scientific consensus** that the presence of dog DNA fragments in contemporary dingo populations, arising from historical hybridisation, **does not diminish their ecological, cultural, or intrinsic value**. (Expert joint statement, May 26, 2026)

The best available science therefore indicates that there is no 'wild dog' problem in NSW national parks, as much of the recent science was not limited to Victoria, but was national in scope. Acknowledgement of this reality greatly simplifies management and policy making about dingo management in NSW national parks. In terms of ecology and wildlife status, dingo management is now much more straight forward than previously thought, as a result of recent research findings and the current scientific consensus.

NSW has the opportunity to avoid Victorian dingo conservation short comings

It is therefore crucial for NSW to avoid any genetic purity-based definition of the dingo for conservation purposes, a policy position which currently inhibits responsible dingo conservation efforts in Victoria. It is now clear that the previously commonplace perception and policy distinction, of a distinction between dingoes and 'wild dogs', is false and cannot provide a rational, scientific basis for dingo management.

When the Victorian government finalised the listing of the dingo as a threatened native taxon under its Flora and Fauna Guarantee Act, only pure dingoes were included. Dingo hybrids, no matter how small the degree domestic dog genetic introgression, remained as established pest animals, under pest animal management legislation. Although listing the dingo as a threatened taxon was a progressive development, the exclusion of all dingo hybrids from wildlife status, to be managed as exotic pest animals, along with rabbits, feral goats and pigs, virtually negated any potential benefits of the listing in practice.

In turn, this ecologically flawed distinction effectively defined the vast majority of dingoes out of existence, designating them as 'wild dogs' for largely administrative and ideological reasons. As a result, the vast majority of ecologically functional dingoes improperly fell under the rubric of Australian and state biosecurity policy. Recent developments in Victoria should serve as a warning to NSW authorities about the ecological folly of denying dingo hybrids wildlife status. The following discussion outlines problem as it has developed in Victoria.

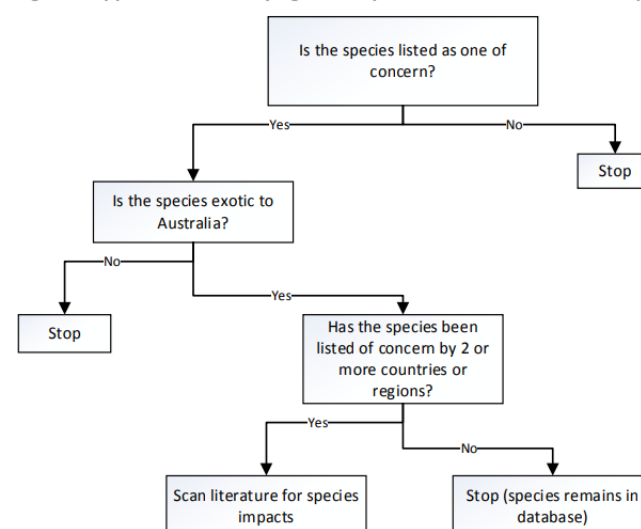
The inclusion of dingoes under biosecurity legislation

The primary focus of Australian and state/territory biosecurity policy, where possible, is to prevent the introduction of exotic pests, plants and animals, diseases and other pathogens that stand to harm Australian interests, whether these be economic, cultural, social, or environmental in nature. When exotic threats do cross Australian borders, the task then becomes either eradication or containment (if the threat becomes 'established').

Complete clarity on this issue is crucial. This is because it provides the basis for distinguishing between policies and programs that are suitable and responsible for controlling exotic threats, including the prospect of eradication or heavy lethal control, as opposed to the policies and programs suited to managing native wildlife should they present as a pest to agriculture, persons etc. Confusion can lead to significant ecological harm.

The following schematic diagram, from the Australian Bureau of Resource Economics and Sciences, which outlines the procedure for identifying exotic invasive species, makes it clear that native species are not subject to biosecurity legislation.

Figure 3 Approach to identifying exotic species with environmental impacts



Yet, unfortunately, such confusion characterises inherited biosecurity policy, both nationally and in Victoria.

ABARE states the purpose of biosecurity legislation clearly and simply:

Australia's biosecurity system aims to protect our unique environment, economy and way of life from the risk of harmful **exotic invasive species** arriving and establishing. (ABARE, Exotic invasive species Identification of species with environmental impacts Technical report 17, 2017) (Emphasis added)

Significantly, the National Biosecurity Committee document, *National framework for the management of established pests and diseases of national significance*, is unambiguous in stating that the category 'established pest' species cannot include native species. It also notes that this approach is consistent with the Intergovernmental Agreement on Biosecurity.

This definition builds on the Intergovernmental Agreement on Biosecurity definition of 'established'. Means a self-sustaining pest or disease that occurs in Australia and is not regarded as eradicable... *Native or indigenous plants and animals, pests and diseases are not characterised as established for the purposes of this framework* (even if having negative impacts, for example over-abundant native fauna). (National Biosecurity Committee, 2017) (Emphasis added)

Given that the purpose of biosecurity legislation is limited to exotic invasive species, it becomes necessary to challenge the inclusion of Australia's native apex predator, the dingo, within the biosecurity framework.

The improper inclusion of the dingo as an exotic invasive species under biosecurity legislation appears to rest upon a false policy distinction in Victoria between dingoes and 'wild dogs'. The classification of dingo hybrids as 'wild dogs' and thereby as 'invasive' exotics under biosecurity legislation, in effect, defines most dingoes out of existence and subjects dingo populations to biosecurity eradication and lethal control programs.

There is much commentary in the biosecurity review literature about the desirability of devolving responsibility for exotic invasive management, by empowering and resourcing local communities and individuals to participate in early-stage detection, and control programs. Such devolution has already been actioned to some degree in relation to alleged 'wild dog' control activities in Victoria.

Community 'wild dog' baiting programs have been actively promoted and facilitated by *Agriculture Victoria*. In reality, such programs have tended to become public relations exercises in an attempt by *Agriculture Victoria* to improve its relationship with landholder communities. Unfortunately, maintenance of the 'wild dog' narrative has been integral to this public relations agenda.

Victorian CaLP Act – root of the problem.

Victorian biosecurity law is encompassed by several acts. The principal legislation is the CaLP Act, which classifies pest animal types, including 'established pest animal'.

Part 8 of the CaLP Act provides for the identification and management of noxious weeds and pest animals, that are or may become a serious threat primary production, Crown land, the environment or community health.

Pest animals are managed under several categories, including 'established pest animals'. These are established in the wild, are deemed a serious threat, should be eradicated, controlled, or their spread in the wild prevented.

The objectives of the Act include the protection of productive and environmental assets: Logically, the Act does not intend that native wildlife be included in its definition 'established' pest animals.

The exclusion of native wildlife is *explicit* in the definitions of 'prohibited', 'controlled', and 'regulated' pest animals, where the definition includes the caveat that "it did not occur naturally in the wild in Australia before European settlement". However, curiously, this caveat is absent in the definition of 'established pest animal'.

To ensure consistency and clarity in the pest animal provisions of the CaLP Act 1994, **to ensure that native wildlife cannot be governed as if they are invasive exotic species**, and to thereby ensure consistency with the intent of federal biosecurity legislation, the CaLP Act definition of 'established pest animal' needs to be amended, to include the abovementioned caveat.

Without such an amendment, Victoria risks conflating the management of exotic invasive pest species with the management of native wildlife that may pose a problem for agriculture etc. Clearly the management response to problematic native wildlife should be distinct from that of exotic invasive species. This current flaw in the CaLP Act has significant implications for the credibility and integrity of Victoria's approach to biosecurity legislation and its environmental responsibilities under federal biosecurity legislation.

As it stands, the Victorian CaLP Act subverts the purpose of federal legislation.

The environmentally harmful potential of mismanaged biosecurity policy

The above contradiction within the Victorian CaLP Act carries inherent risks for biodiversity conservation if coupled with devolution of biosecurity policy and decision making. A major theme within the Victorian biosecurity statement and the draft biosecurity implementation plan is the devolution of responsibility for biosecurity management and implementation to local communities and stakeholders – often agricultural landholders. This is justified by reference to respecting community *diversity* and *local knowledge*, and as a way of mobilising untapped human resources in monitoring and combatting emergent and established biosecurity threats.

It is also clearly envisaged that the Victorian government, and government departments should play a reduced, background role in biosecurity operations. The statement appears to indicate that local groups and stakeholders would be left largely to their own devices to a much greater extent than is currently the case.

In this context, the failure to unambiguously exclude native wildlife under the 'established pest animal' provisions of the CaLP Act is especially problematic. The blurring of the distinction between exotic invasive pests, and native wildlife species in a situation of devolved, localised decision making significantly increases the risk to native wildlife that present as, or *which are perceived to be*, a threat to agriculture, or other human assets. The principal purpose of biosecurity legislation to protect the natural environment and ecology from exotic invasive (non-native) threats will have been significantly undermined.

Unfortunately, this blurring of the distinction between exotic invasive pests and native wildlife is not new to the Victorian biosecurity narrative. Victoria's Biosecurity Statement 2022 is replete with broad, overgeneralised statements which highlight the need to protect agricultural and community interests from harmful pests through biosecurity provisions, without highlighting the necessary focus upon *exotic* invasive pests.

Biosecurity is a collective effort to prevent and manage the harms caused by pests and diseases, and the impact they have on what we value most. (Victorian Biosecurity Statement 2022, p. 6) (emphasis added)

And,

To ensure we can move freely, gather, care for and connect to Country, produce safe and clean food, and enjoy the beauty of the outdoors, **we need to protect ourselves, our farms, our environment and animals from harmful pests and diseases**. (Victorian Biosecurity Statement 2022, p. 7) (emphasis added)

The narrative in the subsequent 2023 biosecurity statement is somewhat improved in providing an emphasis upon exotic invasive pests and pathogens. Nevertheless, as noted above, the underlying flaw within the CaLP Act, which provides for the inclusion of native wildlife in practice, remains.

Regional Victorian farming communities have a long history of deploying lethal control against native wildlife species, which are deemed a threat to agriculture. Increasingly, this has been exposed as excessive.¹ As noted, the Victorian Wildlife Act contains provisions for the control of wildlife that present a genuine threat to agriculture or biodiversity. Whatever the merits of the deployment of these measures under the Victorian Wildlife Act, there is no place good logical or practical reason for the inclusion of native wildlife under biosecurity legislation. Devolution of biosecurity decision making to local or regional communities without the strict, legislated exclusion of native wildlife is a likely formula for legitimising and empowering historically received prejudices and the encouragement of significant harm to wildlife.

There is a strong case that biosecurity legislation cannot have integrity if it either explicitly or inadvertently includes native wildlife species, because to do so is likely to incur significant ecological harm.

Because the purpose of national and state biosecurity legislation is in part protect the Australian natural environmental values from the negative impact of exotic, invasive pests, NSW authorities must be mindful of ecological damage that would likely occur from mischaracterising dingo hybrids as exotic rather than as indigenous.

If dingo hybrids were to governed as 'wild dogs'- improperly designated as invasive exotic pests in NSW national parks, rather than as indigenous wildlife, they will continue to be subject to lethal control and the purposes of biosecurity legislation (which include protection of the natural environment) subverted. Again, any genetic purity-based definition of the dingo must be avoided for this reason.

¹ HIS and EJA, December 2020, *Failing our Wildlife – Why Victoria's Wildlife Protection laws need to be modernised*.

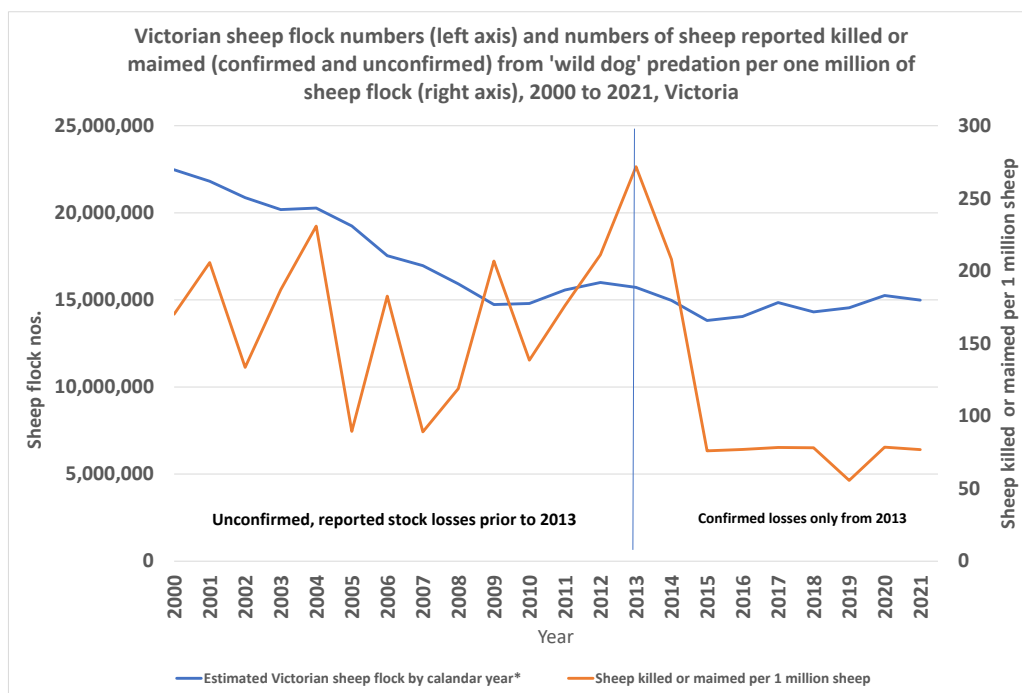
Farm stock predation *rates* are low and often exaggerated

There is no compelling evidence that farm stock predation from dingoes is a significant problem for landholders. Again, the Victorian situation can serve as an indicator for NSW.

The *rates* of farm stock loss to Dingo ('wild dog') predation in Victoria are extremely low and have been so over the longer term. The negligible *rates* of stock loss to dingo predation do not justify widespread unprotection for the dingo and lethal control, as currently occurs.

Figure 1 is based on annual Victorian stock loss to predation data, which was obtained under freedom of information (FOI) legislation from DEECA in April 2024. It plots the size of the Victorian sheep flock (from the Australian Bureau of Statistics Agricultural Census) against the number of sheep lost to dingo predation for the period 2000 to 2021 and calculates sheep lost *per million*.

Figure 1



The key observation is that annual *stock loss rates* are consistently very low, within a range of between 50 and 100 sheep lost per million of the Victorian sheep flock. It is negligible.

Stock loss rates are the best guide to evaluating the seriousness of dingo stock predation. Yet, only *numbers* of stock lost are typically referred to by government authorities, which may superficially look substantial.

Reported Victorian stock loss *numbers*, however, are credible. Victoria maintains the best stock loss data base in Australia. If Victorian farmers want government action in response to stock loss, they need to report the losses. These numbers are widely cited by lethal control advocates themselves. Under reporting of stock losses is not likely to be great. NSW, by comparison, keeps very scant stock loss data, as discussed further below.

In Figure 1, it is important to note the high annual fluctuation in reported predation losses prior to 2014. A plausible explanation is landholder subjectivity in their assessment of the causes of sheep loss (These pre-2014 data are for *unconfirmed* losses). By comparison, the post 2014 data are for officially *confirmed* losses, and show a lower and more stable predation count.

Sheep and lambs are regularly lost in significant numbers from a wide variety of causes, including fox predation. Blaming the dingo can become a tempting rationalisation in areas abutting public land.

Limited stock loss data for NSW are shown in Figure 2. By comparison, data quality for NSW is poor.

Nevertheless, a reasonably complete set of data are found for several years – 2017 to 2019, which provide an insight into the scale of stock loss to dingo predation. As with the Victorian data, the numbers of stock reported lost are taken as a *rate* of the NSW sheep flock. Similarly to Victoria, the stock loss rates to predation in NSW appear to be very low, in the order of between 133 and 274 stock lost per million.

The relevance of this information to the management of dingoes in NSW national parks is that lethal control of dingoes in National parks should not be justified as a response to farm stock loss.

An ecological consideration with regard to lethal dingo control in national parks is that the area of ecological impact extends far beyond the areas of immediate lethal control. This has been modelled for lethal control on Victorian public estate.

Modelling by the Arthur Rhyler Institute in Victoria explores the broader spatial impact of lethal control in relation to aerial baiting in a 2018 research paper (Ramsey, ARI, 2018). Map 1 shows the estimate of the spatial impact of aerial baiting upon dingoes in eastern Victoria. It can be seen from the scale on the map that the extent of the impact is estimated to be 25 kilometers or more from the aerial baiting transects, or in the Victorian Omeo region, an area of approximately 50 kilometers in diameter.

Map 1

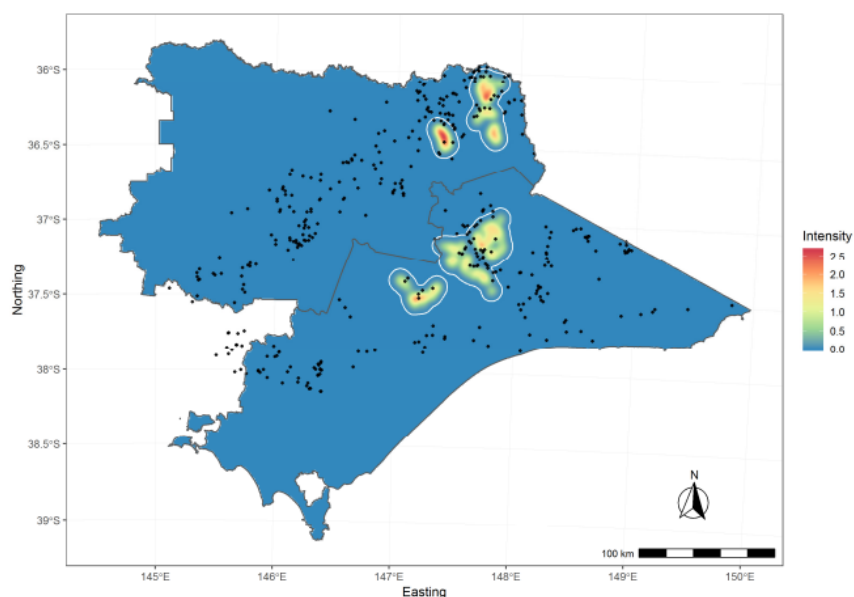


Figure 1a. The intensity of aerial baiting (transect segments per km²) in the Hume and Gippsland regions in Victoria (blue – red gradient) estimated by spatially smoothing the aerial baiting transect locations using a Gaussian kernel smoother with a bandwidth of 2.58 km. Solid points indicate the locations of properties with at least one incident (black points). The white contour represents the likely maximum influence of aerial baiting.

Figure 2

	Western ##	Murray #	Riverina ###	South East *	Gr Sydney **	Central Tablelands ***	Hunter \$	Central West	North West	Northern Tablelands @	North Coast '@@	NSW total	NSW sheep flock	Stock loss per million of stock NSW
2010	no data available	163	0	no data available	no data available	826	no data available	no data available	no data available	no data available	no data available	989		
2011	no data available	137	10	no data available	no data available	409	no data available	7	102	no data available	308	973	33,126,885	29
2012	no data available	157	10	no data available	no data available	302	no data available	41	322	no data available	617	1,147	33,740,310	34
2013	no data available	102	0	no data available	no data available	417	no data available	0	147	no data available	891	1,557	33,068,662	47
2014	no data available	138	54	no data available	no data available	273	no data available	82	263	2017	596	3423	32,308,811	106
2015	no data available	426	34	no data available	162	449	no data available	153	461	2397	714	4796	31,603,746	152
2016	no data available	366	45	119	310	508	412	285	430	2306	796	5577	31,590,796	177
2017	1326	502	29	346	125	287	495	83	61	1282	794	5330	31,082,420	171
2018	127	284	25	427	100	167	386	168	111	1148	792	3735	28,179,307	133
2019	3334	153	37	258	182	362	390	229	130	1266	602	6943	25,319,172	274
2020	no data available	37		89	no data available	94	177	no data available	240	301	no data available	938		

Sources: NSW government data, received by AFCAD Inc. under the Government Information (Public Access Act), June 2020; ABS Agricultural Commodities Australia, selected annual data.

data undifferentiated by stock type

Only broad range minimum-maximum estimates for 'Autumn' and 'Spring' provided; Mid point of estimate range used.

Sheep and lambs only - confirmed cases; data from 2014/15 on is supplied by financial year. However, data are allocated by calendar year thereafter.

* Partial data for 2020.

** Sheep and cattle.

*** Sheep and cattle; 2020 partial data only

\$ Includes all stock types, including poultry and 'native animals'; 2020 partial data only.

@ Killed and maimed sheep and cattle; 2020 partial data only

@@ Sheep, cattle and calves only

Conclusion

Dingoes should be given maximum protection in NSW national parks. Recent genetic research shows that dingoes a distinct evolutionary pathway and are distinct from domestic dogs. The term 'wild dog' is misleading and anachronistic. There is a strong consensus amongst scientific experts that, despite existing levels of domestic dog genetic introgression, dingoes' ecological function is intact, that they are a native wildlife taxon, and that if populations are allowed to recover much inherited domestic dog genetics would be purged. Furthermore, it is widely considered that some degree of domestic dog genetics may be beneficial for the survival of remaining dingo populations, as eastern Australian dingo populations suffer from a low level of genetic diversity.

Any purity-based definition of the dingo for conservation purposes would be ill-conceived and environmentally harmful. NSW has the opportunity to learn from Victorian policy short comings in this regard. Without the formal inclusion of dingo hybrids as indigenous wildlife, dingoes may easily become inappropriately subsumed under biosecurity legislation. If this were to occur, the purpose of biosecurity legislation would be subverted into a tool for environmental harm rather than for environmental protection. NSW national parks may thereby be weaponised against dingoes and sound environmental stewardship.

NSW national parks must be governed as a refuge for NSW dingo populations, free of lethal control. Modelling in Victoria illustrates that lethal control has ecological impacts reaching far beyond sites of its immediate implementation. As such, the positive ecological role of dingoes as an apex predator stands to be diminished within NSW national parks if dingo populations are lethally controlled within them.

Evidence from Victoria, and to a more limited extent NSW (because of poor quality NSW data) is that farm stock loss rates from dingo predation are very low. The perception of high farm stock predation appears to be more a product of inherited misconceptions amongst landholders and government administrators, than a reflection of reality.

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