

**Nomination of Populations of Dingo  
(*Canis lupus dingo*)  
for Schedule 1 Part 2 of the  
*Threatened Species Conservation Act, 1995***

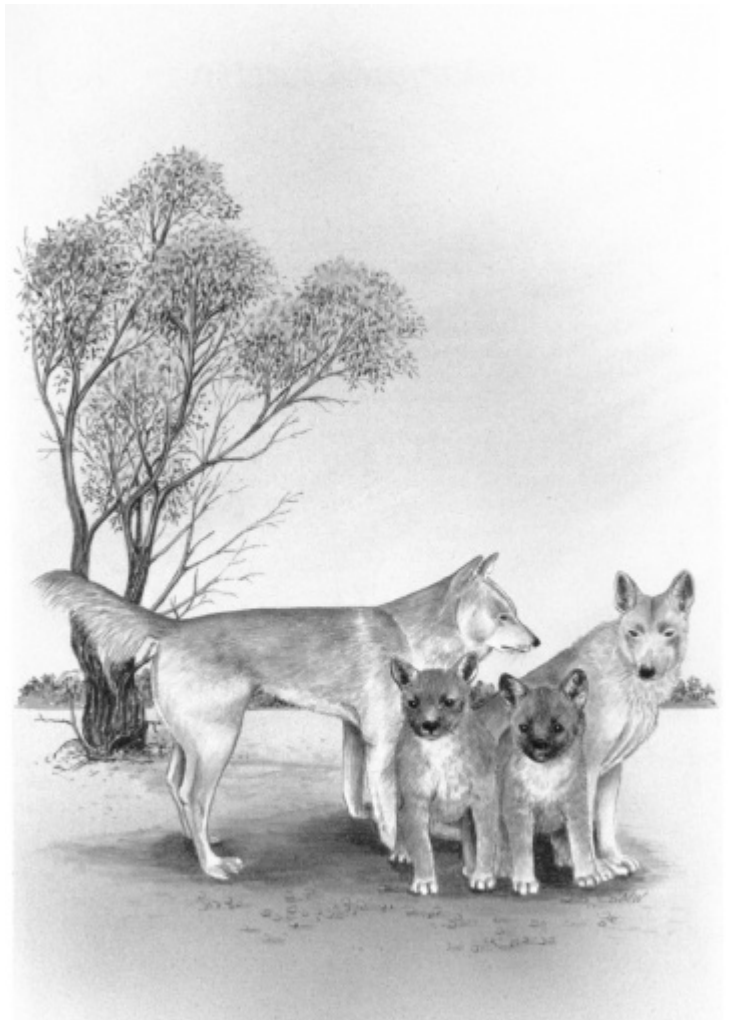


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The following nomination of endangered populations under the *Threatened Species Conservation Act, 1995* has been set out according to legislative requirements.

**(a) the scientific name of the species:**

*Canis lupus dingo*

The legislation defines species to include *any defined sub-species and taxon below a sub-species and any recognisable variant of a sub-species or taxon*. Further the listing criteria **(b)** for an endangered population is eligible if it is "genetically distinct".

For the purposes of the *Threatened Species Conservation Act, 1995* the Dingo is a genetically distinct recognisable variant of a sub-species. The Dingo evolved from the Pale-footed Wolf (also known as the Indian Wolf, *Canis lupus pallipes*) about 6-10000 years ago. Dingo populations are genetically distinct from domestic breeds and hybrid dogs in Australia. The Dingo can be reliably distinguished from other dog breeds by skull morphology (Corbet, 2001) and DNA testing can distinguish the purity of Dingo populations (Wilton, 2001).

The Dingo is an indigenous animal under the *Threatened Species Conservation Act 1995* because the Dingo was "established in New South Wales before European settlement". The oldest Dingo fossils are dated at about 4000 years (Corbett, 2001).

**(b) common name:**

Dingo

**(c) locality (refer to the attached maps)**

**(d) the reasons why the populations are considered to be endangered within the meaning of Section 11 of the Act by the person making the nomination, any specific threats or threatening processes should be identified:**

***The remnant Dingo populations have been hybridised to such a critical level that these populations are in immediate danger of extinction***

"The dingo in the wild is endangered due to hybridisation with domestic dogs" (Wilton, A., 2001).

The question to be answered is "whether it (hybridisation) has reached a threshold for the dingo to be listed as ... a series of endangered populations under the *NSW Threatened Species Conservation Act, 1995*" (Dickman C. R. and Lunney, D, 2001).

Wilton's opinion on the endangered status of the Dingo is based on genetic data showing Dingo hybridisation with domestic and feral dog breeds. This opinion is supported by Corbet's (2001) comparative skull morphology evidence of hybridisation. Mr Corbet used Dingo skull samples to consider the regional purity of dingo populations in Australia. "Based on the skull scores of samples used in this study, the prognosis for regional populations of pure dingoes in NSW is poor" (Corbet, 2001).

"Hybrids exist in all populations throughout Australia and the proportion of hybrids appears to be increasing" (Corbet, 2001). There is also a high proportion of hybrids in zoos and fauna parks (Oakman, 2001).

There is no substantial evidence that indicates current wild dog management practices in NSW, and particularly aerial baiting, have dramatically slowed hybridisation of the remnant dingo populations to prevent significant contamination by an inflow of domestic and hybrid dingo/dog genes.

### **Wild dog management as a threatening process**

There is case to answer that current wild dog management in NSW is a threatening process to the remaining Dingo populations in core habitat areas. The Dingo is listed as a pest requiring eradication under the *Rural Lands Protection Act, 1998* and the Dingo is not protected under the *National Parks and Wildlife Act, 1974*.

The continued aerial baiting of public land areas is proposed as a key threatening process for remnant dingo populations, particularly when farmer lobby groups have considerable influence on the Rural Lands Protection Boards that approve pest control plans for wild dogs. These Boards continue to urge that core habitat areas be targeted for aerial baiting programs (e.g. the current Kosciuszko 1080 aerial baiting trial and continued aerial baiting of national parks in northern NSW, currently being subjected to environmental impact assessment processes).

Current wild dog management aims to prevent stock losses, not protect Dingo populations from hybridisation. "Evidence presented by Fleming *et al.* (1996) showed that aerial baiting was efficient in reducing wild-living dogs by 66-84%, however dog numbers returned to their initial abundance within one year" (Meek and Shields 2001).

The decrease in a Dingo numbers through wild dog management by aerial baiting within core dingo habitat areas is likely to increase hybridisation. The loss of social cohesion within affected Dingo packs, is successively reduced by 1080 control measures. The loss of dominant animals in Dingo packs facilitates interbreeding between the survivors of the original pack and immigrant domestic and particularly hybrid dingo/dogs.

The *Companion Animals Act, 1998* further facilitates dingo extinction, as legislation allows dingoes to be kept as pets (Oakman, 2001). Dingoes do not make good pets and unwanted animals are far likely to be dumped. These expatriate 'pet' dingoes breed with other dogs and the hybrid dingo/dogs are then much more likely to be accepted into wild dingo society in core habitat areas.

**(e) *the best estimation of:***

*(i) the size of the population*

Due to difficulties in the field of distinguishing dingoes from other dog breeds and dingo/dog hybrids it is not possible to give an estimate of the size of these nominated Dingo populations. It is, however, possible to give an estimate of the disjunct boundaries of these Dingo populations as indicated on the attached maps.

The NSW National Parks and Wildlife Service *et al.* (2000) in their submission on the Wild Dog Control Order No 2 identified areas of public land as significant habitat for Dingo populations. "Dingo conservation is most feasible on large reserves where further hybridisation can be minimised (less chance of contact with domestic dogs and pig-hunting dogs than in smaller, or dissected reserves)" (NPWS *et al.*, 2000). [Note: the quotation includes the bracketed text].

The attached list of reserves/forests are considered by these land management agencies "to be important for the survival of dingoes" (NPWS *et al.*, 2000). In addition to these areas, the Pilliga State Forest and Pilliga Nature Reserve are nominated as containing a Dingo population that is important to the survival of dingoes. The Dingo is present in the Pilliga (Paull, 2000).

Dingo populations are effectively disjunct as wild dog management and the aggressive hybridisation process in areas outside those areas nominated prevent the movement of pure dingoes.

While there will be argument about the acceptable proportion of pure dingoes within the nominated populations, the **Precautionary Principle** requires that uncertainty should not prevent effective wildlife management so as to reverse the effects of hybridisation and recover these populations.

Hybridisation of the nominated Dingo populations will continue until these populations are effectively managed so as to be free of domestic and hybrid dingo/dogs.

Based on the findings by Corbett, Dingo hybrids are found across the continent and it is likely that populations consisting entirely of pure dingoes are extinct. It follows that urgent and effective recovery plans should be established as soon as possible to prevent the extinction of Dingo.

In these dire circumstances, the Scientific Committee is obliged to apply the Precautionary Principle and not delay its deliberations regarding this nomination in order to obtain further data on Dingo populations.

(ii) *the current distribution of the species in NSW*

Skull "samples from the coastal regions and the north-east of New South Wales" ... "indicate that these seem to be the best places for finding pure dingoes" (Dickman and Lunney, 2001). From a land management viewpoint, the areas containing Dingo populations have been identified in a submission by land management agencies - see attached (NPWS et al., 2000). [

As pure dingoes cannot be identified easily in the field, it is impossible to determine with any degree of accuracy its current distribution. What little is known suggests that the pure Dingo is either extinct or nearly so and that wild dog management must be adjusted to preserve and maintain the genetic integrity of the remaining populations.

The 1999 Symposium on the Dingo by the Royal Zoological Society of New South Wales was convened to consider whether the dingo qualifies as a threatened species under the *NSW Threatened Species Conservation Act 1995* and, more importantly, if it does qualify on biological grounds, what practical issues does this raise for wild dog control?

The Symposium effectively answered affirmative to the first question but the wildlife management response developed at the Symposium to the second question seeking to reconcile wild dog control and dingo conservation under NSW legislation (Davis and Leys, 2001) is highly questionable.

A management practice of conserving the Dingo has been developed through the *Rural Land Protection Act, 1998*. This legislation requires the eradication of wild dogs, including dingoes, and offers no foundation for Dingo conservation because such work is beyond the gift of the Act. In addition, Rural Land Boards, which have carriage of this legislation, are obliged to focus upon protecting rural land from wild dog attack, not on conserving the purity of Dingo populations on public lands.

## **Conclusion**

The combination of:

- Limited information on the purity and extent of Dingo populations, with no large populations consisting entirely of pure dingoes extant in the wild;
- Dingo conservation management being established under the *Rural Lands Protection Act, 1998* that defines the Dingo as a pest requiring eradication;
- Aggressive wild dog extermination programs adversely; and
- Hybridisation with other dogs,

is a sure formulae for rapid extinction.

Listing endangered Dingo populations under the *Threatened Species Act 1995* is necessary to bring about development of effective dingo-focussed management to ensure recovery of populations of pure dingoes.

## References:

Corbet, L. (2001) The conservation status of the dingo *Canis lupus dingo* in Australia, with particular reference to New South Wales: threats to pure dingoes and potential solutions. In A Symposium on the Dingo, pp 10-19. C. R. Dickman and D. Lunney (eds.), Sydney: Royal Zoological Society of NSW.

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NSW National Parks and Wildlife Service, State Forests of NSW, Department of Land and Water Conservation and Sydney Catchment Authority (2000) Submission regarding public lands to be covered by the pest animals provisions of the Rural Lands Protection Act 1998. Unpublished Report: NPWS: Sydney.

Paull, D. (2002) personal communication. David Paull, Coonabarabran. e-mail dun-narts@hwy.com.au

Wilton, A. N. (2001) DNA Methods of Assessing Dingo Purity. In A Symposium on the Dingo, pp 49-56. C. R. Dickman and D. Lunney (eds.), Sydney: Royal Zoological Society of NSW.

## Declaration

I declare that the information included in this nomination and its attachments is true and correct to the best of my knowledge.

Keith Muir  
Director  
Colong Foundation for Wilderness