

Dingoes: going to the dogs?

There is more dog to many a dingo than meets the eye, according to the results of a study by the CSIRO Division of Wildlife and Rangelands Research. Before this research on the identity of dingoes

began, anecdotal evidence indicated that domestic dogs had been mating with them for years, particularly near agricultural regions in south-eastern Australia.

The dingo's history in Australia goes back 3500 to 4000 years. Scientists speculate that Aboriginal man brought the dingo (*Canis familiaris dingo*) with him from Asia, and that competition from the dingo may have led to the extinction of the native thylacine, or marsupial wolf, in mainland Australia.

Dogs and dingoes belong to the genus *Canis*, which also includes wolves,



Some of the offspring from CSIRO breeding stock: a pure-bred 'black and tan' dingo (the black and tan colouring is rare in the wild); a hybrid bred from two wild dogs caught in central New South Wales; and a dingo-blue heeler cross.



coyotes, and jackals. Domestic dogs (*C. familiaris familiaris*) have, over the period of European settlement on the mainland, literally taken to the hills and become feral. In the Gippsland region of Victoria, dingo-trappers have caught German shepherds, kelpies, collies, border collies, Australian cattle dogs, samoyeds, bull terriers, labradors, and deerhounds.

The trappers also snared dingo-like animals with patchy, spotted, and brindle coats — probable hybrids. Nobody knows for sure just how long

hybridization has been going on and how many of our 'dingoes' are really hybrids. How closely related are dingoes and dogs, anyway? In the mid '70s, other workers conducting experiments on blood enzymes failed to show up any biochemical differences between the two.

Dr Alan Newsome and Dr Laurie Corbett, of the Division of Wildlife and Rangelands Research, together with Ms Sue Carpenter of the Division of Mathematics and Statistics, attempted to resolve the dingo's identity in two steps.

has also occurred there. The red wolf (*C. lupus niger*), in particular, appears to be succumbing to the same method of gradual extinction in the southeastern part of the United States as the dingo in Australia.

It is ironic that the 'ring-in' carnivore that may have helped wipe out Australia's marsupial wolf may itself be usurped by new blood. Dr Newsome and Dr Corbett concluded from the Gippsland sample of hybrids that 'pure dingoes may become extinct in Gippsland over time unless their fitness exceeds that of hybrids and that of feral dogs'. How long the process will take, or how far it will spread, remains to be seen.

Mary Lou Considine

The identity of the dingo. I. Morphological discriminants of dingo and dog skulls. A.E. Newsome, L.K. Corbett, and S.M. Carpenter. II. Hybridization with domestic dogs in captivity and in the wild. A.E. Newsome and L. Corbett. *Australian Journal of Zoology*, 1980, 28, 615-25; 1982, 30, 365-74.