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Dingo wrongly blamed for tiger and devil extinctions

New research suggests dingoes have been unjustly blamed for the extinctions on the Australian mainland of the Tasmanian tiger (or thylacine) and the Tasmanian devil.



Credit: LINC Tasmania

In a paper published in the journal *Ecology*, University of Adelaide researchers say that despite popular belief that the Australian dingo was to blame for the demise of thylacines and devils on the mainland about 3000 years ago, Aboriginal populations and a shift in climate were more likely responsible.

'Perhaps because the public perception of dingoes as "sheep-killers" is so firmly entrenched, it has been commonly assumed that dingoes killed off the thylacines and devils on mainland Australia,' says researcher Dr Thomas Prowse.

'There was anecdotal evidence too: both thylacines and devils lasted for over 40 000 years following the arrival of humans in Australia; their mainland extinction about 3000 years ago was just after dingoes were introduced to Australia; and thylacines and devils persisted on Tasmania, which was never colonised by dingoes.

'However, and unfortunately for the dingo, most people have overlooked the fact that at about the same time dingoes came along, the climate changed rather abruptly and Aboriginal populations were going through a major period of population growth and technological advances.'

The researchers built a complex series of mathematical models to recreate the dynamic interaction between the main potential drivers of extinction (dingoes, climate and humans), the long-term response of herbivore prey, and the viability of the thylacine and devil populations.

The models included interactions and competition between predators as well as the influence of climate on vegetation and prey populations.

The simulations showed that while dingoes had some impact, growth and development in human populations, possibly intensified by climate change, was the most likely extinction driver.

'Our multi-species models showed that dingoes could reduce thylacine and devil populations through both competition and direct predation, but there was low probability that they could have been the sole extinction driver,' Dr Prowse says.

'Our results support the notion that thylacines and devils persisted on Tasmania not because the dingo was absent, but because human density remained low there and Tasmania was less affected by abrupt climate changes.'

The study also involved Professors Corey Bradshaw and Barry Brook from the University of Adelaide and Professor Chris Johnson from the University of Tasmania.

Source: University of Adelaide

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