

Dingoes bring economic benefit to cattle graziers

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Dingo

Stopping dingo control measures such as baiting and fencing could increase net profit for cattle grazing enterprises – that's the surprising result from new University of Adelaide research.

Published in the *Journal of Applied Ecology*, researchers from the University's Environment Institute reported that cattle graziers could improve their <u>profit margin</u> by as much as 83 cents a hectare more by not baiting or fencing <u>dingoes</u>. That means an extra \$83,000 per year for a 100,000 hectare cattle station.

"The conservation of dingoes remains controversial because of perceived threats to livestock," says lead author Dr Thomas Prowse, Research



Associate in the School of Earth and Environmental Sciences and the Environment Institute. "That is despite better understanding of the need for predators for sustainable environments.

"Our study challenges the conventional perception of dingoes as an economic pest that must be controlled. By helping dingoes thrive, we expect improved biomass of native pastures through the reduction of kangaroo populations – and improved returns to cattle graziers.

"Poisoning and fencing are therefore financially counter-productive."

The researchers developed a multi-species model of the food chain and economics of a rangeland cattle enterprise, including simulations of pasture regrowth, grazing pressure and cattle live-weight gain. Tradeoffs between livestock density, kangaroo abundance, calf losses and dingo control were examined.

"Dingoes are predators and they do occasionally take out young livestock, but they also eat a lot of kangaroos and, in fact, seem to prefer them," says co-author Professor Corey Bradshaw, Director, Ecological Modelling at the Environment Institute and recently appointed Sir Hubert Wilkins Chair of Climate Change.

"In a typical cattle station setting in arid Australia, cattle and kangaroos compete for the most limiting resource – grass and other vegetation. With fewer kangaroos around, there is more grass for cattle to eat and more food means bigger and fatter <u>cattle</u>, which leads to more profit for the grazier."

The researchers showed that under normal stocking conditions in outback Australia with unbaited dingoes and controlled kangaroos, pasture biomass increased by 53 kg a hectare.



"Not only are the grazier's profits higher, but there is less inter-annual variation. Fewer <u>kangaroos</u> reduces the amount of change in grass biomass from one year to the next," says Dr Prowse.

More information: "Ecological and economic benefits to cattle rangelands of restoring an apex predator" DOI: 10.1111/1365-2664.12378

Provided by University of Adelaide

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