# Transformation from Conflict to Coexistence with Large Carnivores in Social-Ecological Landscapes

By Louise Boronyak



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#### Thesis abstract

Agriculture and biodiversity conservation are both vitally important human enterprises, yet they are often in conflict. Animal agriculture has been implicated in species loss and the degradation of ecosystems due to land clearing, overgrazing, and conflicts with wildlife. This thesis explores transformation from human-carnivore conflict towards coexistence in rangeland ecosystems where the commercial livestock production occurs. Coexistence provides a powerful way to reframe the relationship between humans and wildlife. Drawing on empirical evidence from field observations and semi-structured interviews with livestock producers, conservation researchers, grazing industry representatives and policy makers in Australia, South Africa and the United States of America I developed case studies of coexistence in each country. This thesis documents evidence-based non-lethal solutions to protect livestock and large carnivores; informs innovative policies and practices; and identifies critical pathways towards coexistence in ways that are beneficial for people, animals, and the natural world.

My thesis offers five key insights to support transformation towards coexistence. Firstly, it emphasises the urgent need to address human-carnivore conflict in extensive grazing enterprises. As conflict contributes to the global decline in large carnivores and secondary extinctions; it undermines human social cohesion; and it drives violence towards wildlife. Secondly, transformation towards human-carnivore coexistence in rangelands is achievable via pathways identified in this thesis. These pathways center on adoption of preventive non-lethal innovations supported by a new farming movement called Predator Smart Farming that balances livestock grazing and wildlife conservation values to unlock the resilience of landscapes, animals (domesticated and wild) and livelihoods. Other important pathways include research, capacity building, outreach and support for preventive non-lethal innovations; partnerships between livestock producers, experts and government and nongovernment organisations; institutional and cultural change; and compensation and marketing programs. Thirdly, I build on knowledge from international best practice to present pathways that facilitate adoption of Predator Smart Farming for Australian grazing enterprises. Fourthly, I explore the barriers that impede adoption of coexistence tools and practices across sociocultural, institutional, and economic sectors. Lastly, I identify strategic leverage points to catalyse transformation towards human-carnivore coexistence by challenging the current lethal carnivore control paradigm, reforming wildlife policy and cultivating a consciousness for coexistence. Coexistence is an action, a worldview, or a destination that orients us towards living alongside wildlife in ways that are respectful, mutualistic and peaceful.

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### Certificate of original authorship

I, Louise Boronyak, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy in Sustainable Futures at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

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