

# Koala overpopulation in South Australia prompts call for humane fertility management

University of Technology, Sydney



Researchers say koala densities in many areas in SA are above what is considered sustainable. Credit(写真提供): Professor Corey Bradshaw, Flinders University

Research into South Australia's koala populations, led by Dr. Frédéric Saltré from UTS and the Australian Museum, provides the first comprehensive population estimate for the region and identifies a cost-effective, humane solution to stabilize current unsustainable koala numbers.

Published in *Ecology and Evolution*, the [study](#) was led by Dr. Frédéric Saltré, who holds a joint appointment as a Research Scientist at the Australian Museum and Senior Lecturer in Ecology and Biogeography at UTS.

The research shows that South Australia's koala population in the Mount Lofty Ranges, currently numbers around 10% of Australia's total population, which is threatening its long-term survival.

Without intervention, this number could grow by a further 17%–25% over the next 25 years, impacting food supply, vegetation and native habitats.

## **Mount Lofty Ranges population challenges**

"Koalas are in steep decline across much of eastern Australia, but in South Australia's Mount Lofty Ranges, the opposite problem is happening: a booming koala population. This should be good news, but these numbers are concerning.



Credit(写真提供): Professor Corey Bradshaw, Flinders University.

Many areas now have koala densities far beyond what the ecosystem can sustain, creating a growing risk of severe overbrowsing that could rapidly damage the very forests koalas rely on for food.

"In the next few decades, following this trajectory, there will almost certainly be a terrible situation of mass koala starvation and death," Dr. Saltré said.

Using [advanced spatial modeling](#) and data from thousands of citizen science observations, researchers found koala densities in many areas are above what is considered sustainable.

## **Ethical management and fertility control**

"We are faced with a difficult conservation dilemma, because traditional methods of population management, like culling or relocation, either raise ethical concerns from the public or are not appropriate for such an iconic native animal.

"How do we manage a species that is now threatened by its own abundance, and do so in a way that protects both animal welfare and long-term ecosystem health?" asked Dr. Katharina Peters, co-author of the study at the University of Wollongong.

Dr. Saltré and his team found the answer through testing multiple fertility-control strategies, which demonstrated that sterilizing approximately 22% of adult females annually, focusing on high-density hotspots rather than across the entire region, would stabilize the population at an estimated cost of \$34 million over 25 years.

"The novelty lies in the [proactivity of the approach](#): Instead of spending money on a conservation plan without knowing whether it will succeed, we use computer simulations to identify in advance which strategies are most likely to work—optimizing both costs and taxpayer investment," said Dr. Saltré.

## **Looking ahead for koala conservation**

As [climate change](#) continues to reshape habitats and species distributions, the researchers say such evidence-based and anticipatory approaches will become increasingly essential for managing high-profile species where public values and ecological needs collide.

This research builds on the previous work carried out at the Australian Museum in sequencing the approximately [20,000 genes](#) in the koala to open up opportunities for medical treatments, provide knowledge about how koalas evolved, and indicate how best to conserve the species.

Publication details (出版の詳細)

Frédéric Saltré et al, Balancing High Densities and Conservation Targets to Optimise Koala Management Strategies, *Ecology and Evolution* (2026). DOI:

[10.1002/ece3.72470](https://doi.org/10.1002/ece3.72470)

Journal information: [Ecology and Evolution](#)