

After 20 years of facial cancers, Tasmanian devil ark project seeks to double its 'insurance' population



It's a little bit of Tasmania tucked away three hours north of Sydney.

Here 180 Tasmanian devils live free from the cancer that has wiped out more than 70 per cent of the wild population.

Tasmanian devils face cancer threat

A zoo and wildlife park in NSW is working hard to ensure the Tasmanian devil population survives a rare and contagious cancer.

But Tim Faulkner, general manager of [Devil Ark](#) in the Barrington Tops, is worried that there aren't enough devils in captivity to ensure the long-term survival of the species.

"The Tasmanian devil is facing extinction with no cure for devil face tumour disease," he said. "There is a real risk that this iconic species could be lost forever."



Tim Faulkner from Devil Ark in the Barrington Tops with a five-month old Tasmanian devil joey. *Photo: Janie Barrett*

It has been 20 years since devil facial tumour disease (DFTD) was identified, which put the carnivorous marsupial on the [endangered animal list](#). It is a rare contagious cancer spread by the animals biting each other during feeding and mating.

Maintaining a captive "[insurance population](#)" away from the disease has been integral to plans to ensure the species - in all its genetic diversity - survives.

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Devil Ark already has a large chunk of the mainland insurance population. But it has now revealed plans to double the number of devils it holds to 360.

Mr Faulkner said: "Doubling the Ark will guarantee Australia doesn't see another iconic species become extinct."



Four-month-old Tasmanian devil joeys in the mother's pouch at Devil Ark in the Barrington Tops. *Photo: Janie Barrett*

He said to double its population, Devil Ark will need to raise \$1.5 million. It has already received a grant of \$250,000 from US organisation, [Global Wildlife](#). Mr Faulkner now hopes Australians will [support its fundraising initiative](#).

There is a passionate conservation community working hard to ensure the devils survive. Devil Ark is [one of more than 30 zoos and wildlife parks](#) in Australia that maintain insurance populations.



Geneticist Kathy Belov with a devil pup. *Photo: Sydney University*

Fear of extinction is beginning to give way to hope for survival in the wild.

"If you'd spoken to me 10 years ago we all felt pretty bleak," said University of Sydney geneticist Katherine Belov. "Whereas now we all feel quite hopeful. I don't think devils will go extinct.

Doubling the Ark will guarantee Australia doesn't see another iconic species become extinct.

Tim Faulkner, general manager of Devil Ark

"We have a great insurance population, such as the one at Devil Ark, which will be a constant source for reintroductions into the wild. And [Greg Woods and his team at the University of Tasmania](#) are making fabulous progress on a vaccine."

Tasmania's Environment Minister Matthew Groom said: "The future of the Tasmanian devil is now looking much more secure.."

[Rodrigo Hamede](#), a biologist at the University of Tasmania, is also optimistic about the future.

"It's important to note that we haven't recorded a single local extinction," he said.

Dr Hamede said: "You probably can't eradicate DFTD but you can manage it so it becomes endemic."

His main concerns are to ensure a strong genetic diversity and to manage the devil in the wild as a top predator in Tasmania.

That view is supported by Professor Belov.

"The Devil Ark and similar organisations are doing a great job," she said. But she also says that her first priority is to ensure Tasmanian animals have a broader genetic representation. This would include a [genetically distinct](#)

[group of devils recently discovered](#) in south-west Tasmania.

Dr Hamede said that one evolutionary change in the animals helping them survive is "precocial breeding". Young devils are breeding in their first year before they catch the disease and die.

Other signs of hope include evidence that some animals have caught the disease and recovered. Professor Belov has worked on a genome analysis to see what aspects of the devils genetic make-up is helping such animals recover.

"Since Europeans arrived in Tasmania there have been three catastrophic population collapses," Professor Belov said.

Devils were wiped out on the mainland at least 3000 years ago. Now there are those who support reintroducing the species on the mainland.

"It will happen," Professor Belov said. "But we need to learn from Tasmania as we reintroduce healthy populations there."

Last year he said: "We suspect that [devils] could help control the fox and cat populations by directly attacking them and their young."

However, there is strong pressure against this from the Tasmanian government.

Environment Minister Mr Groom said: "The focus of the [Save the Tasmanian Devil program](#) is securing the future of the devil where it belongs in the wild in Tasmania. The Tasmanian government does not support any proposal to release devils on the mainland."

Devil Ark's Mr Faulkner said: "A Tasmanian solution is seemingly about politics rather than the species' recovery. We believe the recovery of the devil is a national responsibility."