Inside the race to protect 250 threatened species hit by bushfire

By the National Regional Reporting Team's **Ben Deacon** and **Rachel Carbonell**

Mon 20 Jan 2020

Photo: Brush-tailed rock wallaby habitat has been hit hard by the fires (ABC News: Rachel Carbonell)

Ecologists have calculated that at least <u>6 million hectares of habitat that is home to at least 250 different threatened species</u> has now gone up in smoke.

Key points:

- About 70 threatened species lost more than half their habitat to recent bushfires
- Of the 250 overall species to lose habitat, 25 are listed as critically endangered and include plants, birds, mammals, reptiles and fish
- A panel of senior ecologists has met in Canberra with the Threatened Species Commissioner to plan the next phase in the response

Twenty-five of these species are listed as critically endangered — in other words, on the brink of extinction in the wild.

Michelle Ward from the University of Queensland says about 70 threatened species, including the fire-sensitive long-footed potoroo, lost more than half their range to recent fires.

"We used a combination of NASA satellite imagery and intersected that with the threatened-species range maps," Ms Ward said.

While most of the threatened species hit by fire are plants, there are also a mix of threatened birds, mammals, reptiles and fish.

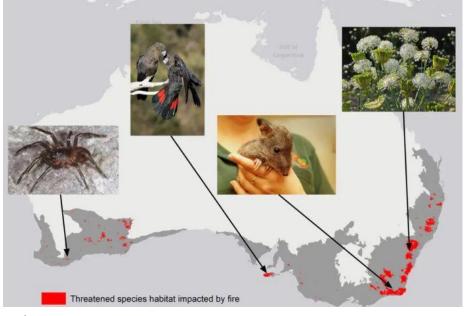


Photo: Threatened species habitat impacted by fire across mainland Australia. (Supplied: Michelle Ward)

James Watson, director of the Centre for Biodiversity and Conservation Science at the University of Queensland, sees the impact of the fires as particularly problematic because many of these threatened species only have small amounts of habitat left.

"We're seeing catastrophic loss of remaining habitat for threatened species right across the southern states of Australia," Professor Watson

said.



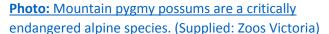
Photo: Long-nosed potoroos have had their habitat burned by fires. (ABC News: Rachel Carbonell)

He said even before the fires Australia faced a threatened-species crisis.

"People should know that we've actually lost more mammals than any other nation on the planet," he said.

The list of threatened species hit by the fire reads like a menagerie of rare and shy creatures. There's the Hastings River mouse, spot-tailed quoll, mountain pygmy possum, southern brown bandicoot, and large-eared pied bat just to name a few.





The road to recovery

"The next step is to get people on the ground looking for these species, ascertaining how much, how many populations are left, how endangered they are," Professor Watson said.

"And realising that some of these species will need urgent attention, and the need for professionals to go and grab some populations and safeguard them in zoos so that they can persist in the long term."



Across the firegrounds, that work has already begun.

In east Gippsland, wildlife officers from Parks Victoria and the Victorian Department of Environment, Land, Water and Planning have been scouring burnt land for injured wildlife.

"In this area, we're seeing koalas most frequently, that's not to say that there aren't other species that have been impacted," senior Forest and Wildlife officer Lachlan Clarke said.

<u>Photo: Wildlife officers coax a koala out of a tree in a burnt area in east Gippsland. (ABC News: Rachel Carbonell)</u>

They use a special technique to get koalas down out of trees to check them.

Wildlife officers extend a long pole with a flag on top, called a bat, which they wave above the koala's head.

The koala moves down the tree away from the flag, where another team member ushers it into a hessian sack.

In some cases, the animals are healthy but stranded with no food. They're quickly relocated to some unburnt forest.



Amid the blackened landscape, Mr Clarke spots patches of refuge for these animals.

"I'm really happy to see some large, intact areas of habitat that hasn't been burned, particularly along water features like creeks and gullies," he said.

Animals that need treatment are taken to a special mobile unit, where Zoos Victoria veterinary staff attend to them.

Top wildlife experts head to Canberra

While rapid-response teams do what they can for injured wildlife, on Wednesday a panel of senior ecologists met in Canberra with the Threatened Species Commissioner, Sally Box, to plan the next phase in the disaster response.

"Some of the immediate actions might be things like protecting those unburned refuges where the plants and animals are still there and are vulnerable," Dr Box said.

"It may be about protecting them from feral predators and herbivores. It may be that we need to protect areas that we thought before were secure and we may need to focus on those areas now. It's a different landscape now."

Reproductive biologist, Marissa Parrott, said Zoos Victoria was clearing space in preparation for receiving animals, while also planning for potential expansion of its captive-breeding programs.

"Every species is different, particularly when we're bringing in a new species that needs care after a massive catastrophe like these bushfires," Dr Parrott said.

"There's a lot of research that we need to do to ensure that the species will come and thrive in captivity, that we can breed them appropriately and, importantly, we can get them back out into the wild where they belong."



Photo: Fire has affected the habitat of the endangered alpine Guthega skink. (ABC News: Rachel Carbonell)

Ecologists like Professor Watson are recognising what is needed to save a species will in some ways clash with current government forestry policy.

"I think we've got to really re-evaluate how we think about forestry and logging in Australia," he said.

"The science is pretty clear. Many of these fires got out of control in logged areas and logging is the very reason why many species are already endangered.

"If we want to maintain threatened species in these landscapes, we've got to realise that forestry does not work to save them."

Photo: The burns on this koala's paws had already started to heal well by the time wildlife officers checked it. (ABC News: Rachel Carbonell)

James Todd, executive director of biodiversity with the Victorian Department of Environment Land, Water and Planning, said there were some native fish in Gippsland whose entire range had burned in the fires.

He said when it rained heavily, there would be a real danger they could be caught up in a fish kill.





Photo: A badge huntsman survives in a patch of unburnt forest. (ABC News: Rachel Carbonell)

"One of the key actions that we need to look at for a range of species, including those fishes, [is] whether we need to pull those fish and other species out and salvage them until their habitat is suitable for them to return," Mr Todd said.

"[That] means going in, literally collecting the fish and taking them to an aquarium that we've got set up within the department to handle that."

None of this will be cheap.

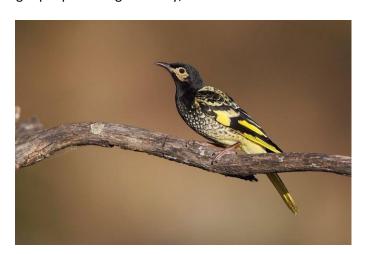
"In the longer term, it is looking at funding and getting the right people the right money," Mr Todd said.

Photo: The regent honeyeater's range has contracted dramatically in the past 30 years. (Supplied: Birdlife Australia)

Funding wildlife recovery

On Tuesday, Federal Environment Minister Sussan Ley announced an initial \$50 million for wildlife recovery.

Described by the Government as a "down-payment", half the money was earmarked for first responders like zoos and wildlife groups, and half to programs driven by the Threatened Species Commissioner.



Professor Watson said tackling the wildlife crisis would require a sea change in government policy.

"Right now, there is a paucity of money going towards threatened-species management in Australia at the federal level," he said.



<u>Photo: Professor James Watson warns an extinction crisis</u> beckons. (Supplied: University of Queensland)

"The budgets have gone down over the last 10 years in terms of how much money is being spent on endangered species."

But the alternative, he said, was unthinkable.

"There is no doubt that if we just tackle this problem using business-as-usual strategies, we are going to sleepwalk straight into an extinction crisis," Professor Watson said.