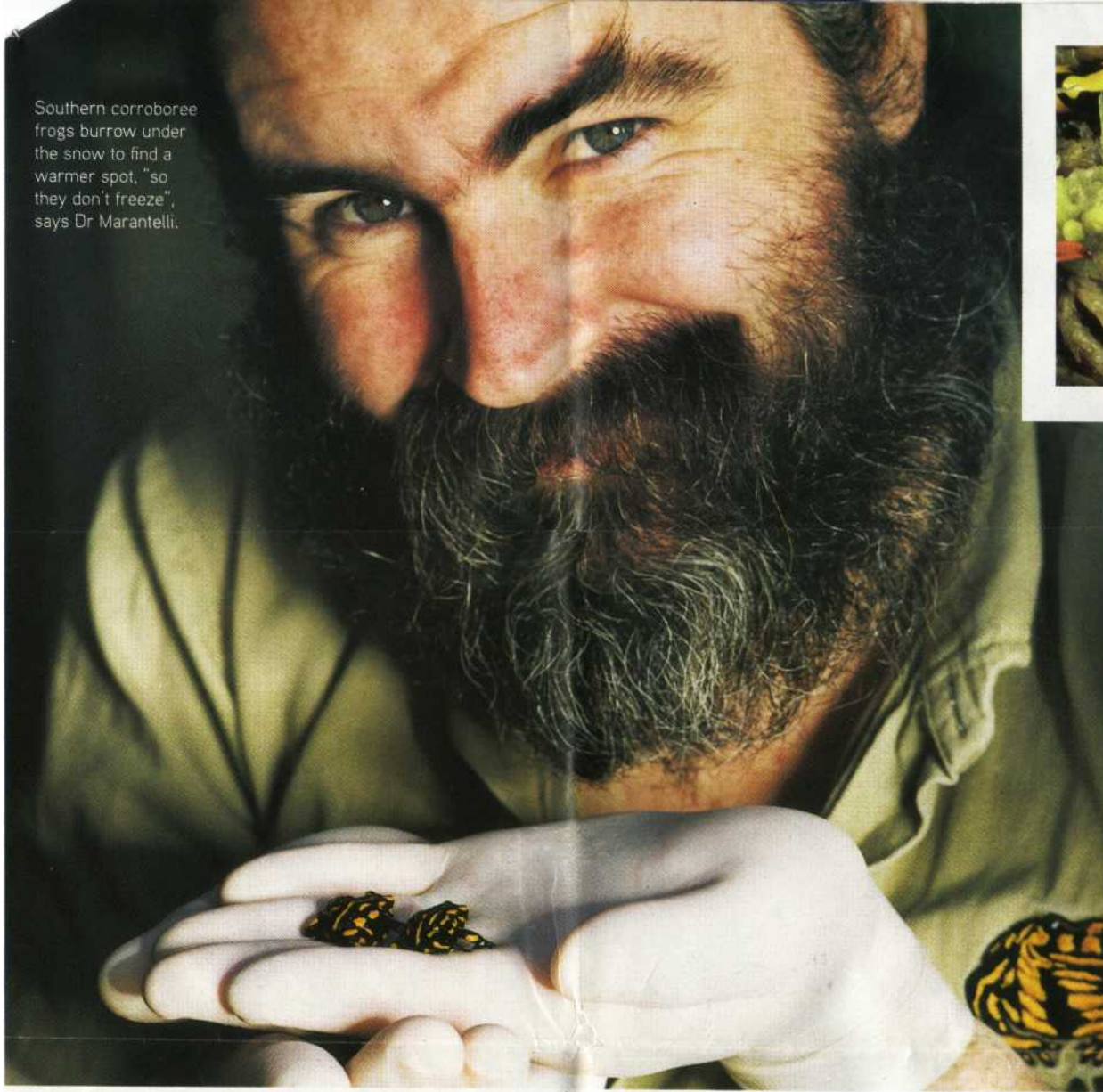


Southern corroboree frogs burrow under the snow to find a warmer spot, "so they don't freeze", says Dr Marantelli.



been millions of southern corroboree frogs," says Dr Marantelli, 37. "That's when we think the fungus arrived."

The ARC commenced a high-stakes rescue program around eight years ago, and for a while, things were looking pretty good. Collecting eggs from Kosciuszko National Park, the frogs' natural habitat, Dr Marantelli and his team grew them to tadpoles before returning them to the wild.

But just as numbers were increasing, the 2002 bushfires came. Hundreds of frogs were destroyed. "Now we're down to 250 frogs spread across 27 locations. It's a very sad state of affairs."

Dr Marantelli hopes to start returning frogs to Kosciuszko over the coming year, but while the fungus is still out there, and the threat of bushfire remains, it's a high-risk endeavour. "You can't save the frog in a fish tank, you've got to save them in nature. The battle is in the bush."

The southern corroboree frog may be number one on the list, but Australia has more endangered amphibians than any

## "YOU CAN'T SAVE THE FROG IN THE FISH TANK, YOU'VE GOT TO SAVE THEM IN NATURE. THE BATTLE IS IN THE BUSH... IT'S A SAD STATE OF AFFAIRS"

a bunch of shipping containers and filled them, too." When Dr Marantelli ran out of space, he relocated the centre to its current digs in Werribee on the outskirts of Melbourne.

It is here that some 1500 southern corroboree frogs reside in a sterilised, refrigerated shipping container. They're our most endangered amphibian, and Dr Marantelli is determined they will not end up like the seven species of Australian frog that have become extinct since 1984.

So what's killing this distinctively patterned creature, which feeds on ants and grows to just 3cm? The main culprit is chytridiomycosis, a fungal disease that rots frogs' skin. It is thought the fungus arrived in Australia on the back (literally) of the African clawed frog in the 1930s, which was used extensively for lab research.

Because the fungus evolved in Africa, the African clawed frog had immunity. But when the introduced species found its way into the bush and mingled with home-grown croakers, the deadly disease spread. "As recently as the 1980s, there would have

other country - 15 at last count, with a further 12 listed as vulnerable. All have been hit by the chytrid fungus, which is also decimating frog populations in North America, South America and Europe.

Globally, almost a third of all amphibians are threatened with extinction within a century, according to a study published in the distinguished journal *Science*. These results are particularly alarming considering frogs are regarded as a reliable litmus test for environmental change.

The tiny amphibians also play an important role in the ecosystem. "Frogs eat insect pests and produce tadpoles, which are an important food source for water birds," says Dr Marantelli. "They're one of the most diverse groups of creatures on the planet."

There is an urgency in Marantelli's voice, and no wonder. In 1994, the last captive sharp-snouted torrent frog died in his hands. "Nothing compares to watching a species disappear," he says quietly. "I was depressed, but also motivated because I don't want that to happen again." ■

### SOUTHERN CORROBOREE FROG

"I'd say I'm very interested in frogs, but everyone else would say I'm obsessed," laughs Dr Gerry Marantelli. And everyone else could be right. As director of the Amphibian Research Centre (ARC), home to more than 50 species, the hirsute frog biologist is about as committed to things that croak as one could be.

After a stint at the Melbourne Zoo, Dr Marantelli started the ARC in 1994 - in his home. "My whole house was full of frogs. I had some big sheds out the back and filled them with frogs, then bought

**How can I help?** If you admire the work of these conservationists and would like some more information on their work or the endangered species they help, log on to the following websites: for Jim and Jean Thomas' Scott's tree kangaroo program, visit [www.tenkile.com](http://www.tenkile.com). To learn more about the Lord Howe Island stick insect, visit [www.zoo.org.au](http://www.zoo.org.au). And to investigate Dr Marantelli's southern corroboree frog progress and the Amphibian Research Centre, visit [www.frogs.org.au](http://www.frogs.org.au)