

Cane toads can be stopped

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It may be possible to stop the spread of cane toads into new areas of Australia according to new research published today in the *Journal of Applied Ecology*.

One of the lead authors of the study, James Cook University's Dr Ben Phillips, said that their work, which involved an international team of scientists, showed that artificial waterbodies installed by graziers acted as critical stepping-stones for the toad invasion.

"By removing these waterbodies in key locations it is possible to halt the spread of toads," he said.

[Cane toads](#) are currently spreading into the vast Kimberley region of north-western Australia and will likely completely occupy this region within ten years.

"This conquest has not gone unchallenged, but massive efforts by community groups over the past five years have done nothing to stop or even slow the invasion of toads," Dr Phillips said.

"The reason for this failure is that toads produce 10-30 thousand eggs at a time and can move very large distances, so removing enough individuals to slow their invasion is effectively an impossible task."

Dr Phillips said that "by removing around 100 artificial waterbodies, toads can be prevented from occupying 268,000 square kilometres of their potential range in [Western Australia](#), which is an area larger than

Great Britain".

Stopping the invasion of toads into Australia's Pilbara region would protect numerous species, including northern Quolls (an endangered cat-sized marsupial [carnivore](#)) and many species of goannas and [snakes](#), which are badly affected when toads invade.

"While we have shown that it is possible to stop toads, actually doing so is going to require a lot of community support as well as serious [financial compensation](#) to any graziers that are affected by modifications to their stock watering systems," Dr Phillips said

"We have shown that stopping toads is possible, but the exact details of how to implement our plan are still to be worked out."

Cane [toads](#), one of the world's worst invasive species, have proved difficult to stop. In Australia, where they were introduced in 1935, they have spread to occupy more than 1.3 million square kilometres and have had major impacts on many native species. Their spread continues across northern Australia at an accelerating rate.

More information: Reid Tingley, Benjamin Phillips, Mike Letnic, Gregory Brown, Richard Shine and Stuart Baird (2012). 'Identifying optimal barriers to halt the invasion of cane toads *Rhinella marina* in arid Australia', [doi: 10.1111/1365-2664.12021](https://doi.org/10.1111/1365-2664.12021) , is published in the *Journal of Applied Ecology*.

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