



TROPICAL SAVANNAS CRC

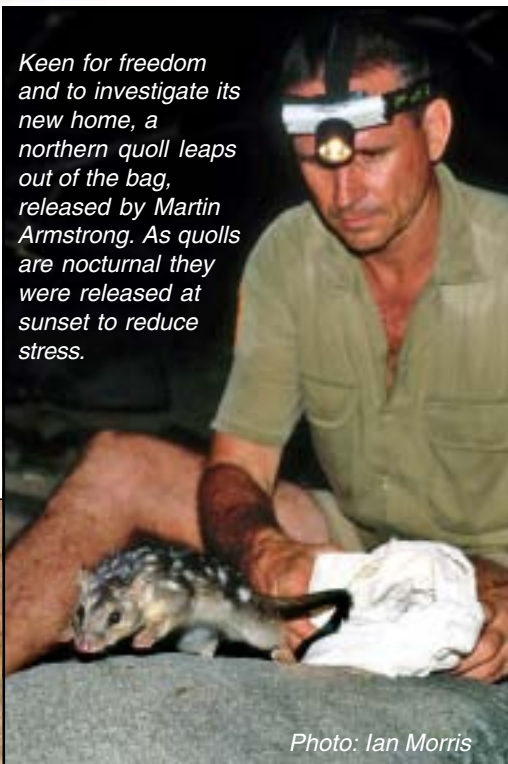
Cooperative Research Centre for Tropical Savannas Management



Island refuge gives quolls a chance to survive

A rescue plan to place the northern quoll on remote islands in the Northern Territory, safe from the cane toad, is off to a promising start. The project team* reports.

The cane toad, below, is spreading across Australia.



Keen for freedom and to investigate its new home, a northern quoll leaps out of the bag, released by Martin Armstrong. As quolls are nocturnal they were released at sunset to reduce stress.

Photo: Ian Morris

Cane Toads are likely to colonise all of the monsoonal northern mainland of the Northern Territory within the next two or three years and as Meri Oakwood's study indicates (see opposite page), we may now lose the Territory's entire mainland quoll population. Consequently, a rescue program was initiated to establish quoll populations in a safe refuge on offshore islands remote enough to be beyond the reach of toads.

This exercise was marked by a high degree of collaboration among Parks

Australia North (the agency managing Kakadu National Park), the NT's Department of Infrastructure Planning and Environment, the Northern Land Council and the Threatened Species Network. In the Northern Territory, almost all islands are inalienable Aboriginal freehold lands, and wildlife management programs in these areas must have the consent and involvement of Aboriginal landowners. In this case, the Aboriginal owners of the islands supported the program, and were prepared to accept the new responsibility of looking after the translocated animals.

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MISSION:

To achieve sustainable use and conservation of Australia's tropical savannas through excellence in collaborative research, communication and education

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Left: Luke Djamanggi Bukuladjpi, David Campbell and Bruce Lirra Ganambar examine a quoll

The islands are Aboriginal land and strict conditions apply to visits. Contact the Northern Land Council: (08) 8920 5100

Photos: Ian Morris

Through Aboriginal custom, the translocation was negotiated between Aboriginal landowners from which the quolls were sourced, and Aboriginal landowners on the islands. Mainland landowners 'lent' their quolls for safe keeping to the owners of the islands, in the expectation that, if properly looked after, the quolls (or more likely, their descendants) will be returned once the menace has passed.

Island journey

Two uninhabited islands were selected for the program: Pobassoo and Astell, in the English Company Islands group, off north-eastern Arnhem Land. On the basis of previous surveys, these islands were known to contain suitable habitat, were large enough to support a reasonable quoll population, were remote, and had no other conservation values that may have been affected by the introduction of quolls.

In February and March of this year, 65 quolls were captured from mainland areas not yet

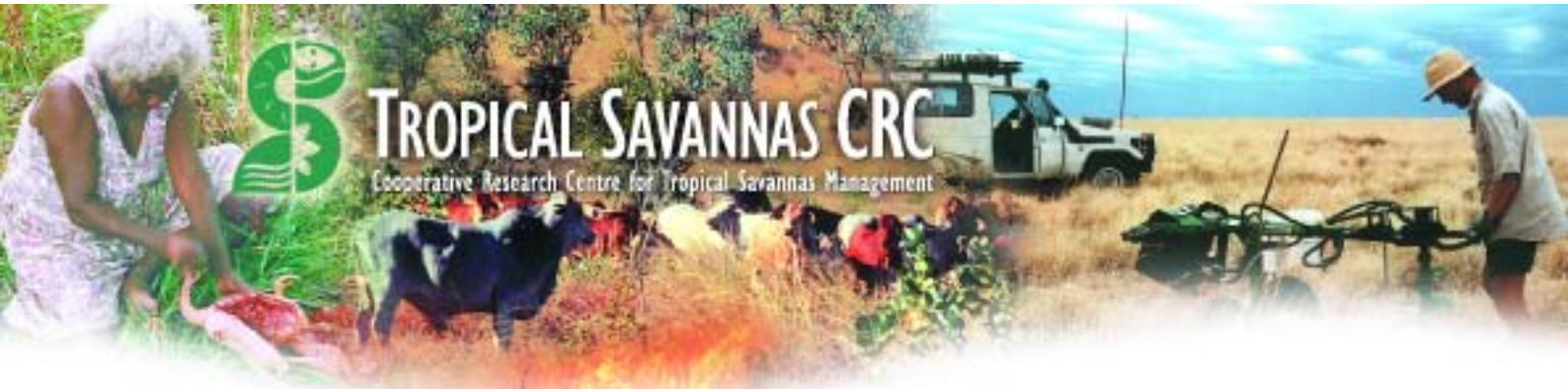
penetrated by cane toads. Each quoll was first taken to the Territory Wildlife Park to be microchipped and genetically profiled. With a field team of zoologists and Aboriginal landowners, the quolls were then transported, by plane and boat, to the islands. On each of the two islands, at least 10 quolls were fitted with radio-transmitters, in order to monitor their fate over the first few weeks following their release.

The quolls thrived, proving hardier travellers than many of the humans. On release, most moved immediately to large boulder piles and rocky cliffs that provided ideal shelter. Over the next few weeks, some settled within a small area while others moved up to 2–3 km. During this time we re-trapped many of the released individuals and their condition and weight gains were mostly excellent.

Settling-in process

We returned to the islands in late July to monitor the quoll populations. The results were very heartening. On both islands, the quolls were doing





well. Almost all quolls re-caught had put on weight and were in great condition. All the female quolls caught had pouches full of babies. Quoll tracks and other evidence were found over most of the island, well away from release points. At this stage, the translocation program appears to be a remarkable success. We plan to visit the islands next February, when we will investigate the recruitment of this year's young into the population, and hence whether the population is likely to be self-sustaining.

While this program should benefit the quoll, we acknowledge that many species may be affected by cane toads, and translocation programs may not be achievable for these.

Aboriginal engagement is a vital part of this project, and much interest has been stimulated among the Aboriginal landowners. Apart from their importance now for refugee quolls, the islands off north-eastern Arnhem Land have many other natural and cultural values of local and national significance. But there are few resources available for their management. The quoll project may be an important catalyst for continuing collaborative work between scientists, land councils and Aboriginal



After release the quolls dispersed over the islands. Brooke Rankmore radio-tracks a quoll located on the edge of the peninsula.

Photo: Ian Morris

landowners, and may help foster an Aboriginal ranger scheme to help maintain the wildlife and traditional management of these beautiful islands.

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History of the cane toad: experiment turns to invasion

In 1935, the Australian Bureau of Sugar Experimental Stations imported about 100 cane toads from Hawaii to the Meringa Experimental Station near Cairns, releasing more than 3000 in the sugar cane plantations of north Queensland.

The toads were meant to eat French's cane beetle and the greyback cane beetle, the larvae of which eat the roots of sugar cane and kill or stunt the plants¹. While

it had little effect on the cane beetles, the toad has spread rapidly since, causing extensive but still poorly defined impacts upon Australian wildlife.

By 1982, they had spread from north Queensland to the Northern Territory border and, by 2001, they had reached Kakadu National Park.

1. Australian Museum Online
<www.amonline.net.au/factsheets/canetoad.htm>

Acknowledgements

This work was dependent upon the help of many people and groups, including Parks Australia, Arafura Pearls, the Territory Wildlife Park and the Threatened Species Network.

More information Environment Australia

<ea.gov.au/biodiversity/threatened/informationfactsheets/quoll/northern.html>

Commonwealth Acts to save quolls

<www.deh.gov.au/minister/env/2003/mr02apr03.html>

