THE AUSTRALIAN

Bringing beasties back from the brink

GRAHAM LLOYD, ENVIRONMENT EDITOR THE AUSTRALIAN MAY 07, 2011 12:00AM



Dryandra ranger Tony Friend, who is responsible for the future survival of numbats in Western Australia, releases an endangered marsupial into the wild. Picture: Vanessa Hunter Source: The Australian

ON the bone-dry plains of the West Australian wheatbelt, east of Perth, and in the parched Murray-Darling Depression, 150km south of Broken Hill in western NSW, native animals of the critically endangered woylie marsupial species are getting another chance.

Sheltered behind cat-proof fencing, woylie numbers are rising at two conservation projects that illustrate the marriage of commerce and compassion that may represent the last hope for some of Australia's most threatened wildlife species.

It is a success that not only shows the devastating impact of feral cats, which are estimated to eat two million native animals a day in the top one-sixth of the continent alone, but also raises uncomfortable questions about whether government is up to the task of credible wilderness management, following the collapse of woylie numbers at a government-run site.

Private conservationist Atticus Fleming says governments must reassess their roles in wildlife conservation. They need to consider reversing a trend in ecological management and put monitoring and control staff back into remote areas.

Alternatively, he says, they should assess whether those management roles should be contracted out to organisations, such as Australian Wildlife Conservancy, of which Fleming is the Perth-based chief executive.

One of the two successful projects, the Wadderin project near Narembeen in WA, is a community-based, 450ha fenced reserve on water commission land that has been developed during the past five years with support from another private group, FAME (Foundation for Australia's Most Endangered Species).

The project has received a \$96,000 grant from state gambling revenue and fencing labour from a local prison

gang.

For drought-struck farmers in the Narembeen area, where the average farm size has risen from 450ha to 6800ha with a consequent loss of regional manpower, the Wadderin sanctuary gives hope that passing tourists may stop overnight and support new business opportunities.

"Africa has the big five and we can have the not-so-big four," Narembeen wheat farmer and project driver Brian Cusack says. "They are woylies, red-tailed phascogales [another marsupial species], bandicoot and brush-tailed possum."

The other project is at Scotia Wildlife Sanctuary, near Broken Hill, a project started by conservationist John Wamsley's former company Earth Sanctuaries and taken over by Australian Wildlife Conservancy. About 600 woylies (also called brush-tailed bettongs) are thriving along with six other threatened species that have been listed as locally extinct in NSW.

These include the numbat, the bridled nailtailed wallaby, burrowing bettong, mala (a hare-wallaby), greater stick-nest rat and greater bilby. But it is a different story elsewhere.

The numbat, which features on WA's state emblem, is back on the endangered list after a collapse in numbers despite government conservation at Dryandra, south of Perth, where the marsupial was once so plentiful that tourists on a day trip there were sure to spot one.

If it weren't for a campaign to transfer animals captured at Dryandra to fenced sanctuaries across the nation, the future of the species would be in doubt.

Government rangers at Dryandra have seen numbers grow from a low in the mid-1980s with an active conservation effort, only to see it crash from the peak of about 850 in 1992 to about 50 today.

Dryandra ranger Tony Friend says the shrinking of the numbat population has largely occurred in the past three years and its demise is seen as an unintended consequence of efforts to eradicate foxes, which opened a space for feral cats in the predatory chain.

"The theory we are working on is that it is an increase in feral cats," Friend says. "That has certainly been measured here and proven through the study of woylies, which were fitted with radio collars so they could be tracked when they died.

"Out of 98 woylies, 69 were taken by cats and only 11 taken by foxes. It was quite a surprise because you don't see the cats like you do the foxes."

To combat the problem, WA is developing poison baits called Curiosity and Eradicate for feral cats that so far has been trialled with mixed results. Cats have proved harder to bait than foxes because they are fussier about what they eat.

A bait has been developed in which the poison is contained within a capsule that dissolves in the stomach of the cat.

Nonetheless, experience shows baiting must be accompanied by other methods and that, outside of island populations, new cats will quickly fill the void of those that are killed. There is a critical weight range for species that have declined, says Jeff Short, adjunct associate professor in the school of biological sciences and biotechnology at Murdoch University. He also manages wildlife at the Wadderin sanctuary project through his company Wildlife Research and Management.

Most vulnerable are species that weigh between 35g and 5.5kg. Animals below 35g, such as mice, are eaten by cats and foxes but reproduce quickly and have more opportunities to shelter. Animals over 5.5kg, such as wallabies and kangaroos, are too big for the predators.

Those in between - the very large native rodents, bandicoots and rat kangaroos from open habitat in central Australia - are most vulnerable.

For Fleming, the failure of numbat conservation at Dryandra is a disgrace.

"It proves that government stewardship of endangered animals is not succeeding," he says.

The best example of government failure is in Kakadu, where in the past 15 years there has been a 75 per cent decline in small mammal numbers.

"It is a World Heritage-listed area with a \$20 million budget, yet the only bit of data on the health of the plan is of a catastrophic 75 per cent decline of small mammal numbers," Fleming says.

"Can you imagine anyone else running a business like that? It sums up that the existing model for conservation in the country is not working. We have got to find a new and better way to do things."

AWC owns and manages more than 2.6 million ha throughout Australia, from Cape York and the Kimberley to the southwest forests. Its estate claims to protect more threatened species than any other non-government conservation organisation. With a \$10m annual budget and a staff of 80, AWC grew out of a project started by Australian conservationist and philanthropist Martin Copley in the mid-1990s. It acquired four properties from Wamsley's Earth Sanctuary project.

"Wamsley had 10 properties, of which only three or four were viable for conservation," Fleming says. "His model was for a publicly listed company, which was the wrong model because he had to generate revenue from tourism and was caught between having properties that were good for conservation but not for tourism and vice versa.

"Scotia is a terrific property for conservation but it is a two hours' drive from Broken Hill and no one is going to go out there for tourism."

Fleming concedes that Wamsley had pioneered the use of feral-proof fencing but says, unlike AWC, he had not done this on a large scale.

Fleming says feral-proof fencing is an essential bridging strategy to preserve threatened species while a more permanent solution is found to the problem of feral cats.

"The fence is a starting point, not the end game," he says.

"We need to put them in place to prevent the extinction of animals such as numbats and buy time to work out how to control foxes and cats in the landscape level."

Fleming says the government model is failing because of competition, from feral herbivores, such as cattle, horses and pigs, to carnivorous mammals, such as foxes and cats, and inappropriate fire management.

"The woylie is a good example," he says. "It was taken off the conservation list prematurely.

"We now have 600 in a growing population behind a cat-proof fence but numbers have collapsed from the original release site [Dryandra]."

At Scotia it took six months to get the last feral cat out of the fenced area using traditional methods of trapping, shooting and baiting.

AWC now also has another weapon: a springer spaniel cat-detector dog called Sally.

"This dog will be brilliant to clean out cats from fenced areas," Fleming says. "It chases them up a tree where they can be shot or tagged for research."

Fleming believes no one knows much about feral cats and AWC is doing more research on them than anyone else.

"What we do know is that in the top one-sixth of the country, feral cats are killing a minimum of two million native animals a day," he says. "We do 90,000 trap nights every year in our properties. In the Kimberley we are now doing an aerial fire management program that involves dropping 50,000 fire bombs from a helicopter to control-burn.

"There have been 70 translocations of threatened species behind a predator fence and we are now starting to release some of those populations back into the landscape. We are quietly developing a new model for conservation [that] is delivering results: measurable increases in populations of threatened species."

www.australianwildlife.org (http://www.australianwildlife.org)

www.fame.org.au (http://www.fame.org.au%20)