

FAUNA

WESTERN SHIELD ~ REVIEWED

Tony Start

BECAUSE recent media reports about a review of CALM's ambitious program, Western Shield, were brief (TV, radio and newspapers are always pressed for space) we'd like to give Western Wildlife readers some of the missing detail. We'll fill in some gaps by looking at the history and scope of Western Shield, why it was reviewed, who did the job and what they concluded. We too are somewhat pressed for space so we'll tell you how to find out more.

Basically, Western Shield aims to recover threatened fauna by controlling feral predators, particularly foxes and cats – but that is deceptively simplistic. The project's origins were in research that showed two basic facts:- (1) dwindling remnants of once-common species like numbats, woylies and rock-wallabies could recover if foxes were removed from their habitats and (2) native animals are very tolerant of the toxin, 1080, in poison-bushes (*Gastrolobium*; they grow naturally in southwest habitats) but minute quantities are lethal to exotic mammals. It is no coincidence that the last populations of woylies and numbats were found in places where poison bush is abundant; if foxes eat animals that have eaten 1080, they die.

Now we could dream of reconstructing mammal faunas and the ecological services they provide. Western Shield is turning the dream into reality but it requires a huge commitment to public relations, manufacturing and distributing



bait, constantly seeking more effective and more efficient ways to do things and monitoring the results. We've improved all those things as well as minimising risks, and translocating captive-bred and wild animals. Unlike foxes, cats generally shun carrion (and baits) for live prey. However, as they prevent recovery in more arid areas, researching ways to control them is critical and there have been huge advances in that direction.

At the moment, CALM drops 5 baits per ha four times per year over an area of about 3.5 million ha from aircraft fitted with state-of-the-art navigational equipment that controls precisely where the planes are and where baits are dropped. Moreover, every baited piece of land is subject to an annual risk-assessment and prescription. During its seven-year life, the complexity and sophistication of Western Shield has grown so fast that CALM's Executive Director decided it was timely for us to stand back while a panel of experts, who have had nothing to do with the project, review the whole program.

An independent and competent review was assured by appointing three eminent scientists from other States who have complimentary skills in economics and

management. They were Professor Hugh Possingham, Chair of Mathematics and Zoology at Queensland University, Professor Peter Jarman, an expert in wildlife management at the University of New England and Allen Kearns, Deputy Chief of CSIRO's Sustainable Ecosystems Division. Allen is Canberra-based.

The panel spent a week in Western Australia during which members attended a workshop to hear a dozen papers encompassing management, PR, operations and R&D presented by key staff to an audience of about 200 people representing the community, sister agencies and people from all walks of life who are involved one way or another in aspects of Western Shield. The panel spent a second day discussing issues raised at the workshop with authors, senior staff and other key people. The rest of the time was spent meeting the Minister, the Conservation Council, viewing captive breeding facilities at Perth Zoo, the bait factory at Harvey, Barna Mia and other facilities at Dryandra. Unfortunately Prof. Possingham had to return home but the others visited Project Eden facilities at Denham. At all the field sites, they met informally with the local staff.

The panel's report is now on the CALM web site. If you have the opportunity, view it (at www.calm.wa.gov.au/projects/west_shield_indep_review.html). If that is hard for you to do I'd be happy to send you a copy (contact details below). In any case, here's a

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summary. The panel noted a series of substantial achievements in the areas of threatened species recovery and the status of a broad spectrum of other species, skills in captive breeding and translocation of fauna, bait manufacture and baiting technology and public awareness. They summarised their view of the project thus:

We believe that Western Shield is a world-class predator threat abatement program that is strategically targeted at the recovery of a wide range of threatened fauna. The success of the program has been a consequence of:

- ▶ southwest Western Australia's natural advantage in having 1080-tolerant native fauna, while introduced mammals remain susceptible;
- ▶ implementing a scientific research and management framework that exploits that natural advantage;
- ▶ a clear vision of the scale of the predation control challenge and the potential rewards in terms of reintroductions and in situ recovery of native fauna;
- ▶ dedicated and competent staff; and operational efficiency,

particularly with respect to baiting operations.

However they also made seventeen recommendations. Some are very specific. E.g.

- ▶ Western Shield should continue!
- ▶ Western Shield's scope needs to be clearly focused and defined to eliminate ambiguity. They suggested "*Feral predator control (where predators include foxes, cats and in particular cases rats and maybe even pigs) for the purpose of recovering remnant, and re-establishing new, populations of critical weight range mammals and associated terrestrial vertebrates (eg reptiles, ground-nesting birds)*".
- ▶ The project has reached a complexity that requires one, clear, senior leader to coordinate and integrate the various components
- ▶ Community involvement should be moved from consultation and publicity to genuine dialogue and real partnerships at strategic and project levels

Others raise issues that they say CALM must address. While there

are observations on options, the panel recognised that the Department is ultimately responsible for deciding how to act in those areas, and addressing the issues should be a priority job for the senior leader when an appointment has been made. The topics include: a need for full-cost accounting, bait development, procurement and delivery, monitoring, research (more on cats and the role of dingoes in predator complexes), moving into arid areas, future directions for Project Eden at Shark Bay and the use of islands for marooning threatened fauna, public relations, publication of scientific work and captive breeding. The final recommendation stresses the need to use 1080 wisely. They say it is critical to the survival of many native animals and nothing should be done that might jeopardise public acceptance of its use for that purpose.

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NEWS

Launch of the Drummond Natural Diversity Recovery Catchment Plan.

IN October, some 50 people (including many *LFWers*) assembled at Drummond Reserve in Toodyay to hear Environment Minister Dr. Judy Edwards officially launch the plan. It was lovely weather, the reserve looked superb, and people took advantage of the attendance of experts such as botanists Neville Marchant and Greg Keighery to meander through the bushland, learning about its ecology. The photo shows a group looking at one of the reserve's gems - a pristine clay-based ephemeral wetland covered in Robin Red-breast Bush.

