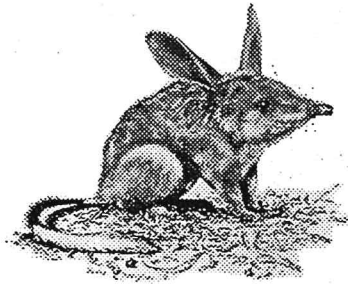


western shield

SPEAKERS KIT



WILDLIFE RECOVERY

Bringing our wildlife back from the brink of extinction

THE WESTERN SHIELD PROGRAM

Slide 1: “Western Shield”

- Only a few years ago, foxes and cats were making a meal of Western Australia’s wildlife — contributing to the extinction of ten native mammals with dozens more species threatened.
- CALM has successfully pioneered programs to control foxes to prevent further extinction. This work has now been expanded into the world’s biggest campaign against feral predators, to save native animals and return them to areas where they once thrived.
- Bringing wildlife back from the brink of extinction — Western Shield is the boldest wildlife recovery initiative ever attempted.

Slide 2: Map of Western Australia highlighting areas

- With an annual budget of more than \$1.5 million, the program covers more than 3.5 million hectares of WA's conservation lands, which in the future will be extended to 5 million hectares.
- It operates in areas as diverse as Cape Range National Park near Exmouth, Peron Peninsula at Shark Bay, the south-west forests, the south coast, the edge of the Wheatbelt and inland arid regions.

Slide 3: Three elements

1. Broadscale fox baiting;
2. Development of effective broad scale cat control;
3. Restoration of native animals to former habitats and abundance through captive breeding and translocations.

Slide 4: Farm land clearing

- Before European settlement, native fauna and flora was abundant in WA. Farmland clearing was the major cause of habitat destruction and fragmentation resulting in the loss of species.

Slide 5: Other causal factors — stock, feral animals, weeds, burning

- The introduction of farming animals such as sheep and cattle and feral animals such as goats and rabbits into the Australian environment also caused habitat destruction.

Slide 6: The European Red Fox

- However, the greatest immediate impact on native wildlife has been predation by foxes.
- Originally introduced for the sport of hunting, foxes are a major threat to the continuing survival of native species in the weight range of 35 g to 8 kg.

Slide 7: Distribution of fox in Australia

- The fox now occupies the entire southern two thirds of the continent. The decline of native animals has been correlated with the expansion of fox occurrence.
- Fox densities are highest in agricultural and pastoral areas from the Pilbara to the south-coast.

Slide 8: Feral cats

- Cats have been on the mainland since before white settlement. They have contributed to extinctions in arid areas.
- To combat this a special cat bait is being developed.

Western Australia has natural advantages in controlling these two predators.

Slide 9: Gastrolobium plants

- Poison bushes that contain the poison sodium fluoroacetate - manufactured synthetically under the name 1080.
These native plants belong to the genus *Gastrolobium*.
- Native animals have co-evolved with these plants and as a result have very high tolerances to 1080 — they are able to metabolise the 1080 faster than it can affect their organ function.

Slide 10: Meat baits.

- 120 gm meat, dried down to 45 gm.
Very hard — biltong — appearance.
Approx 4.5 mg of 1080 is put in each bait, with one bait to every 20 ha.
- Bait 4 times per year - Jan, March, June, and Sept.
Smaller reserves are baited more frequently on a monthly basis.

Slide 11: Baiting sign.

- All target areas are signposted to inform the public when they are entering a baited zone.
Pets should not be permitted to roam.
Baits are very attractive to domestic dogs and are fatal if ingested.
There is no antidote and no safe period during the year when dogs can be allowed to roam. Baited areas should be considered toxic at all times.

Within a few years, it's expected that up to 30 native fauna species will be significantly more abundant and more widespread than they are today. Already, work under the program during the past two years and previous pioneering research by CALM scientists has shown that effective fox control leads to a recovery in the number and range of many species of native animals.

The results of programs carried out under Western Shield are illustrated in the following slides.

Slide 12: Woylie and other medium size mammals at Battalling

Slide 13: Chuditch capture rates in Julimar Conservation Park

Slide 14: Woylie capture rates in Julimar Forest

Slide 15: Woylie and other medium size mammals at Hills Forest

Slide 16: Brush tail possum at Lake Magenta Nature Reserve

Already three native animals have been removed from the threatened species list as a result of fox baiting.

Slide 17: Woylie

- First wildlife recovery success — the woylie was removed from the State, national and international conservation lists in 1996 as a result of successful management, primarily fox control.

Slide 18: Tammar Wallaby

- Tammars are slower to respond to fox control because they have a slower rate of reproduction. However, mainland populations have responded very well after five years or more of fox control and new populations are being established through Western Shield.

Slide 19: Quenda

- Once found throughout the south-west of the State, they now exist in high numbers where fox control is in place.

We hope to have the same success with the following animals. A number of native animal translocations have already taken place.

Slide 20: Chuditch

- Have been reintroduced at Julimar and Lake Magenta nature reserves and Cape Arid NP, and are increasing in numbers in the south-west forests.

Slide 21: Numbat

- WA's faunal emblem has been reintroduced to Mt Dale, Dragon Rocks NR, Boyagin NR, Tutanning NR, Stirling Range NP and Battalling forest block.

Slide 22: Ring tail possum

- Reintroduced to Leschenault Peninsula CP, Lane Poole CP and Yalgorup NP.

Other animals the project aims to help include:

Slide 23: Dibbler

- Small animal now only found in very scattered populations in the heaths of the south coast. Used to have a far more extensive range.

Slide 24: Red tailed phascogale

- Found in reserves in the Wheatbelt. Responds to fox control but other environmental factors are more significant.

Slide 25: Black flanked rock wallaby

- Now only found in a few Wheatbelt and desert reserves and at Cape Range NP at Exmouth.
Extremely threatened by fox predation.
Responds well to fox control.

Slide 26: Quokka

- Common on Rottnest but uncommon on the mainland.
Few scattered populations still exist in swamps in the south-west forests.
Will expand if foxes can be controlled.

Tragically, many of the native wildlife species Western Shield aims to help recover are at very low numbers in the wild. It would take many decades for them to naturally re-establish their populations.

Therefore, it has been essential to build numbers up before reintroducing those species into areas where foxes and feral cats are being controlled.

A number of captive breeding programs have been established to support Western Shield species recovery plans.

In WA several programs are underway at Peron Peninsula, Kanyana, Dryandra, Two People's Bay NR and Perth Zoo.

Slide 27: Bilby

- CALM has established bilby breeding programs at Kanyana Fauna Rehabilitation Centre in Perth, and at Peron Peninsula, with great success — more than 12 bilbies have been born in the programs.

Slide 28: Western barred bandicoot

- Also part of breeding programs at Kanyana and at Peron Peninsula.

Slide 29: Western Swamp tortoise

- In conjunction with Perth Zoo, CALM has established chuditch, numbat, Greater stick-nest rat and Western Swamp Tortoise breeding programs.

For many animals in the arid zone, it is a combination of fox predation and feral cat predation that is the cause of population decline. To this end, CALM has embarked on a bold project to complement the scientific work being done in the south-west and northern jarrah forest.

Slide 30: Project Eden

- **Aptly titled Project Eden, the initiative aims to turn the 1050 square kilometre Peron Peninsula in the World Heritage Listed area of Shark Bay into a haven for threatened native animals.**
- **It is the biggest semi-arid zone nature conservation program in Australia.**
- **Since CALM began the project four years ago, foxes have been all but eliminated and work is being undertaken to bring cat numbers to an acceptable level.**

Slide 31: Predator proof fence

- **To prevent reinvasion by foxes and cats, a feral barrier fence has been erected across the isthmus.**

Following predator control, restoration of native fauna has begun with the successful reintroduction of woylies and malleefowl. The woylies were translocated from Dryandra and Battalling. The malleefowl came from a special breeding enclosure established at Peron Homestead.

Slide 32: Malleefowl

- **One of a number of species being bred and reintroduced at Peron**

One of WA's most threatened animals has also been brought back to the mainland.

Slide 33: Banded hare wallabies

- Only found on islands off Shark Bay, the Banded hare wallaby has been translocated into special breeding facilities at Peron.

Western Shield does not stop at feral predator control and wildlife recovery.

An important part of the project's success is the education of young Western Australians in the importance of our native wildlife.

Slide 34: Possum in a trap.

To this end, CALM has created a Western Shield Action Pack for upper primary school students that encourages awareness of the conservation of WA's native fauna species.

Slide 35: Action Pack

- The pack provides teachers with four ready-made lessons on WA's threatened native animal species, and includes teachers' notes, resource sheets and activity sheets.

Slide 36: Children viewing native wildlife

- By using the pack, students get a chance to win a night out with the woylies — an overnight camp at a wildlife destination in the south-west.

Another important part of the project is community involvement.

Slide 37: Cat clinic in Denham

- Whether it is cooperative baiting with farmers, volunteers assisting in monitoring wildlife across the south-west or the steralisation of cats in Denham - community support is vital.

CONCLUSION

This project has achieved major breakthroughs in bringing native animals back from the brink of extinction by controlling introduced predators.

The war against killing machines has been greatly helped by the generous support of the corporate sector - namely Alcoa Australia, Cable Sands and Westralian Sands.

As more of the project's short-term goals are reached and significant in-roads are made into scientific research, we are beginning to realise the fantastic implications it has for wildlife conservation worldwide.

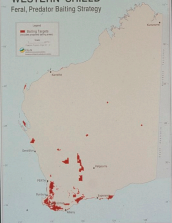
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Department of Conservation and Land Management

WESTERN SHIELD

Feral, Predator Baiting Strategy



- Increase fox baiting
- Effective broad-scale cat control
- Reintroduce rare native animals







Spread of the Red Fox in Australia.









1080 POISON RISK



DANGER

FOX BAITs of dried meat containing 1080 POISON have been laid in this vicinity.

1080 is poisonous to humans and domestic animals.

Contact your local CALM office for information on Western Shield Wildlife Recovery Program.

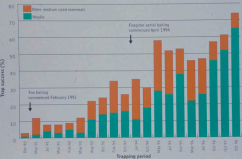
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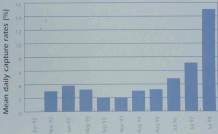
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Caring ... Naturally

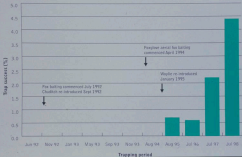
Trap success rates for Woylie and other medium sized mammals at Batang Forest



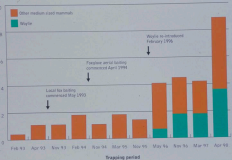
Chuditch capture rates in Julimar Conservation Park



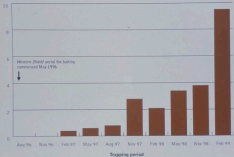
Trap success rates for Woylie at Julimar Forest



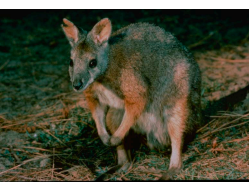
Success rates for Weivle and other medium sized mammals at Hills Forest, near... ..



Trap success rates for Brush-tail Possum at Lake Magenta Nature Reserve



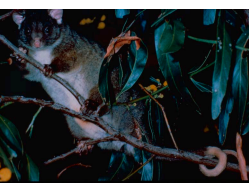


























PROJECT EDEN



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Western Shield Action Plan

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