

Our Iconic Local Endangered

Brush-tailed Rock-wallaby

Threatened Species Day - September 7





Threatened Species Day is celebrated annually across Australia on September 7 to raise awareness of plants and animals at risk of extinction and to highlight the amazing work that is being done to save them.

The day commemorates the death of the last Tasmanian Tiger (Thylacine) at Hobart Zoo in 1936.

It is a day when we turn the spotlight on our unique native species and ecosystems that are under threat and reflect on how we can protect them into the future.

The Friends of the Brush-tailed Rock-wallaby Inc. has been actively protecting a local iconic endangered species since 1995.

For a small cost you can help:

Become a Friends Member, symbolically Adopt a Kangaroo Valley Rock-wallaby or purchase merchandise.

The Friends needs your help to secure the future of these beautiful, agile little creatures.

We also need assistance on the committee and through tax-deductible donations.

Rockwallaby.org.au



Australia has the highest rate
of extinction on the planet 🙄

Our extinction crisis is caused by habitat loss, degradation
& fragmentation AND predation by introduced foxes & cats



Am I a Brush-tailed Rock-wallaby?

Nup! I'm a cute but common Swamp wallaby

Am I a Brush-tailed Rock-wallaby?



Nup! I'm a Wallaroo



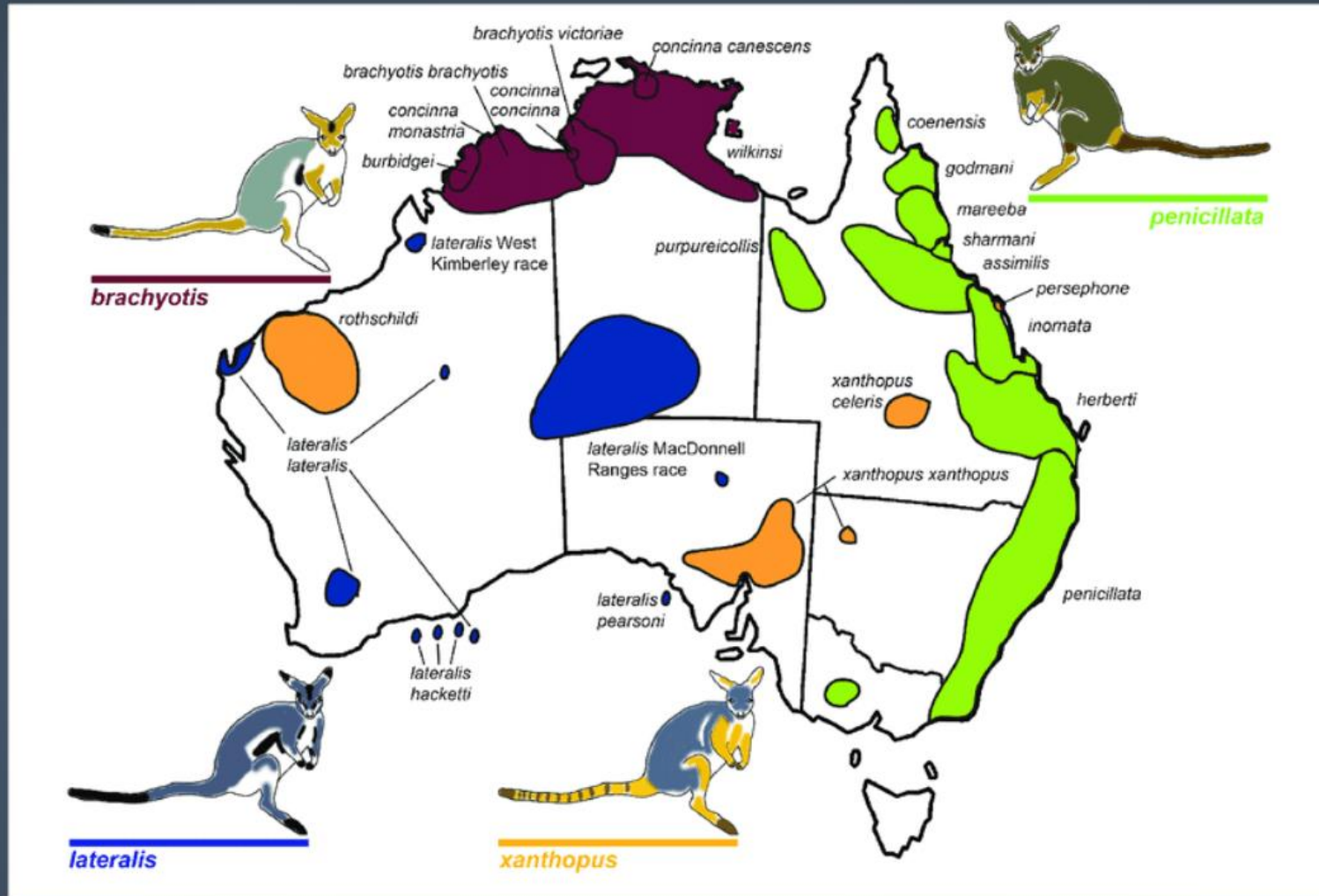
Nup! I'm a Tree kangaroo



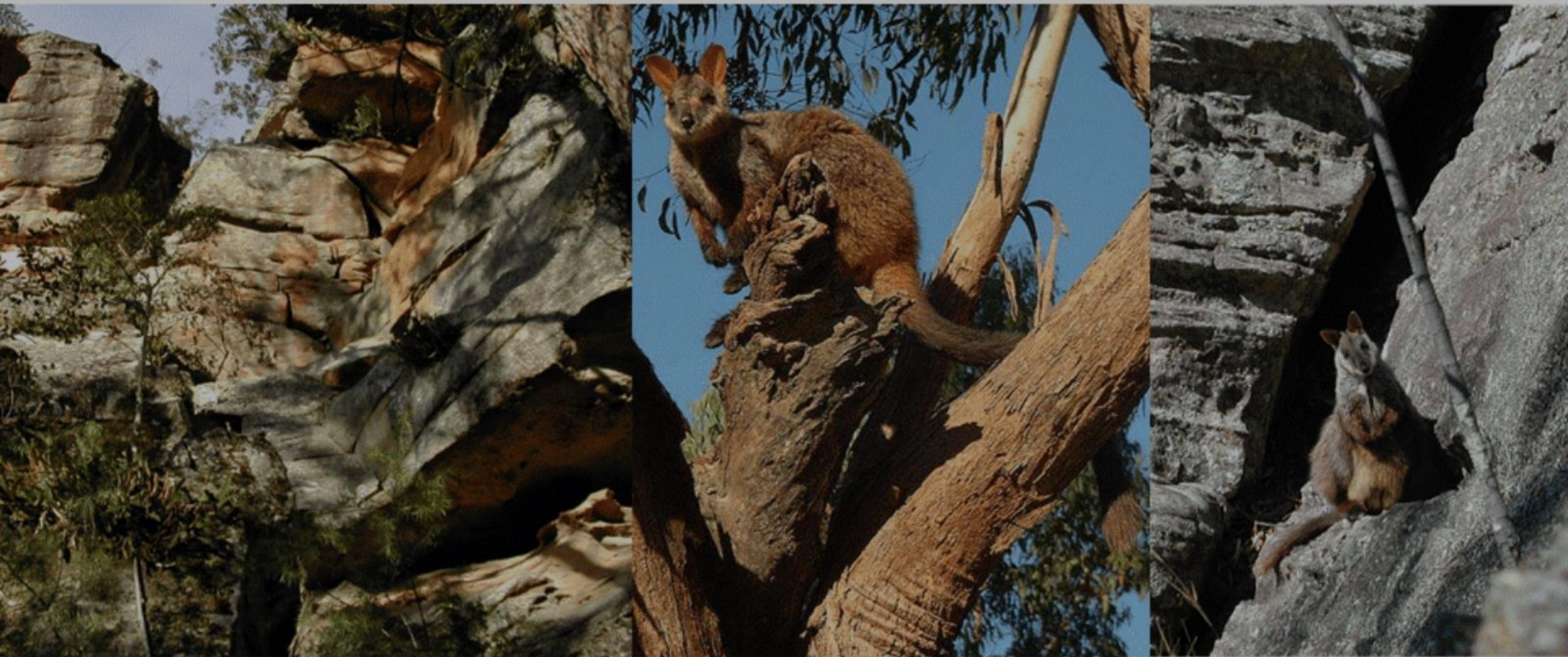
I'm a Brush-tailed Rock-wallaby



We are too!



Map of Rock-wallaby taxa distributions across Australia



My HABITAT - see ... I can climb trees too!



We live in complex rocky outcrops and escarpment with crevices and vegetation



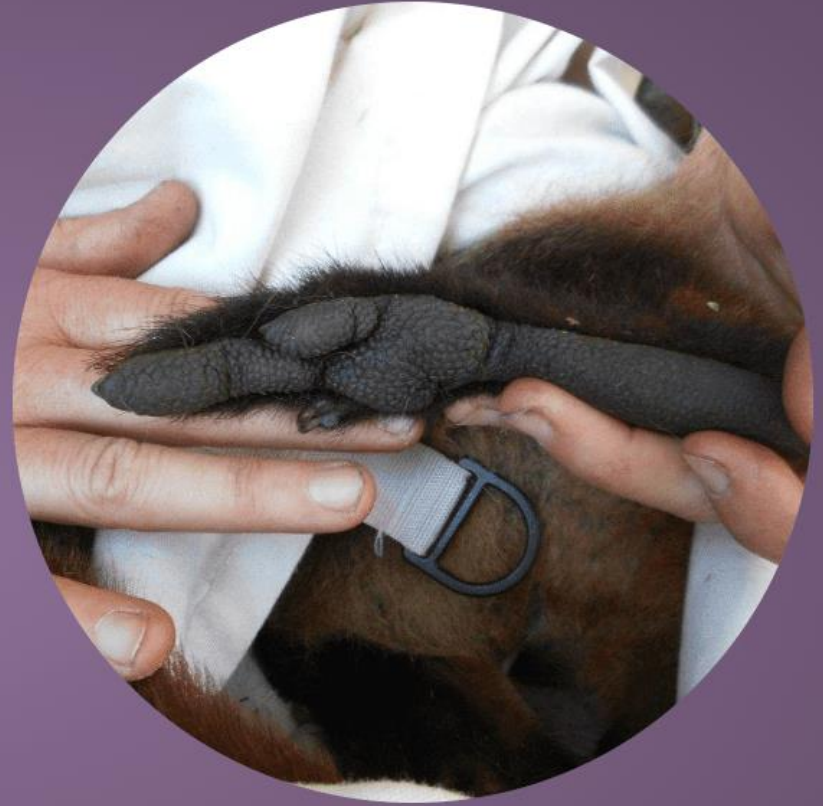
Why do you think we prefer a north-facing aspect?



We are ADAPTED
to our physical environment



Strong arms for climbing
Strong tail for balance & steering



Flexible feet with *super* grip



We are camouflaged too!

We live in family groups called *Colonies* where females have stable, overlapping territories and breed with the dominant male

Mature males fight for dominance and traditionally facilitated genetic exchange through breeding with neighbouring colonies



Brush-tailed Rock-wallabies (BTRW) were once abundant and widespread across the rocky country of south eastern Australia from southern Queensland to Victoria

Gavin Swan 20

Now that you know me ... what's THE ISSUE?

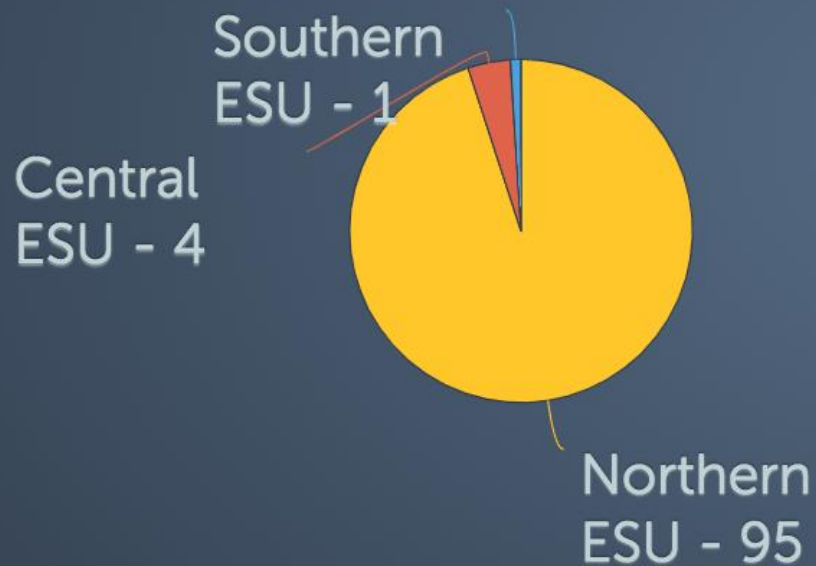
POPULATION and RANGE dangerously DECLINING

- especially in the south and west extent

3 Evolutionary Sustainable Units (ESU)

1. Northern ESU = NSW/QLD border - 95% of BTRW population
2. Central ESU = Hunter Valley / Warrumbungles / Shoalhaven
 - Endangered
3. Southern ESU = <50 in captivity & East Gippsland
 - Critically Endangered (unsustainable?)

Estimated ABUNDANCE of BTRW Evolutionary Sustainable Units



The Central ESU is managed under the *Iconic* stream of the NSW Government's SoS 'Saving our Species' program

10 sites receive SoS funding

The *Friends* community group supplements the cost of the Kangaroo Valley program

Why is BTRW threatened with extinction?

THE IMPACTS:

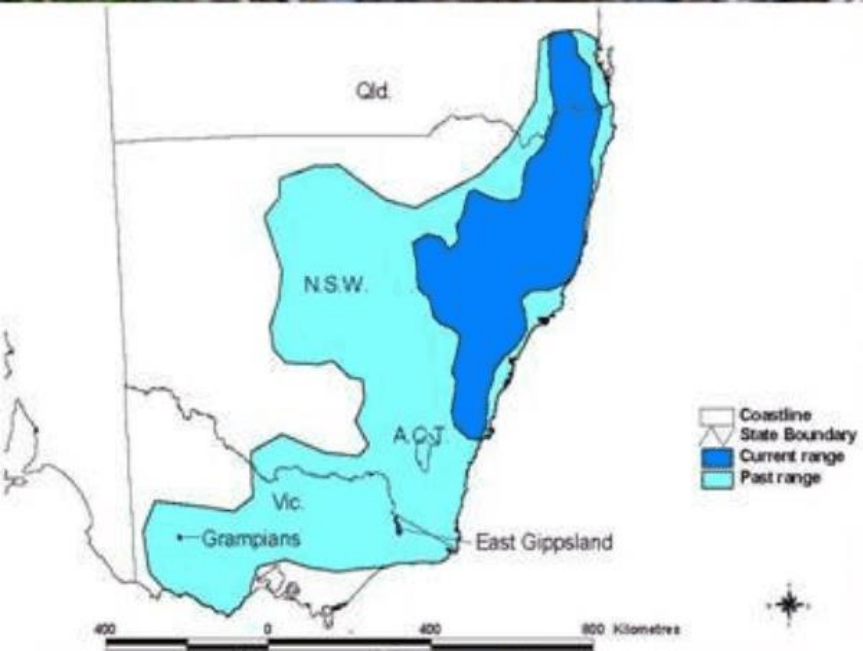
PAST HUNTING by humans for fur and sport

PREDATION OF EMERGING JOEYS BY FOXES

Small, geographically isolated populations = GENETIC DECLINE

Habitat loss & fragmentation, weed invasion, climate change,
fire, competition by feral goats, disease,
predation by dogs & cats







Why are joey's
so vulnerable
to fox predation?



BTRW Recovery Program & Threat Abatement STRATEGIES:

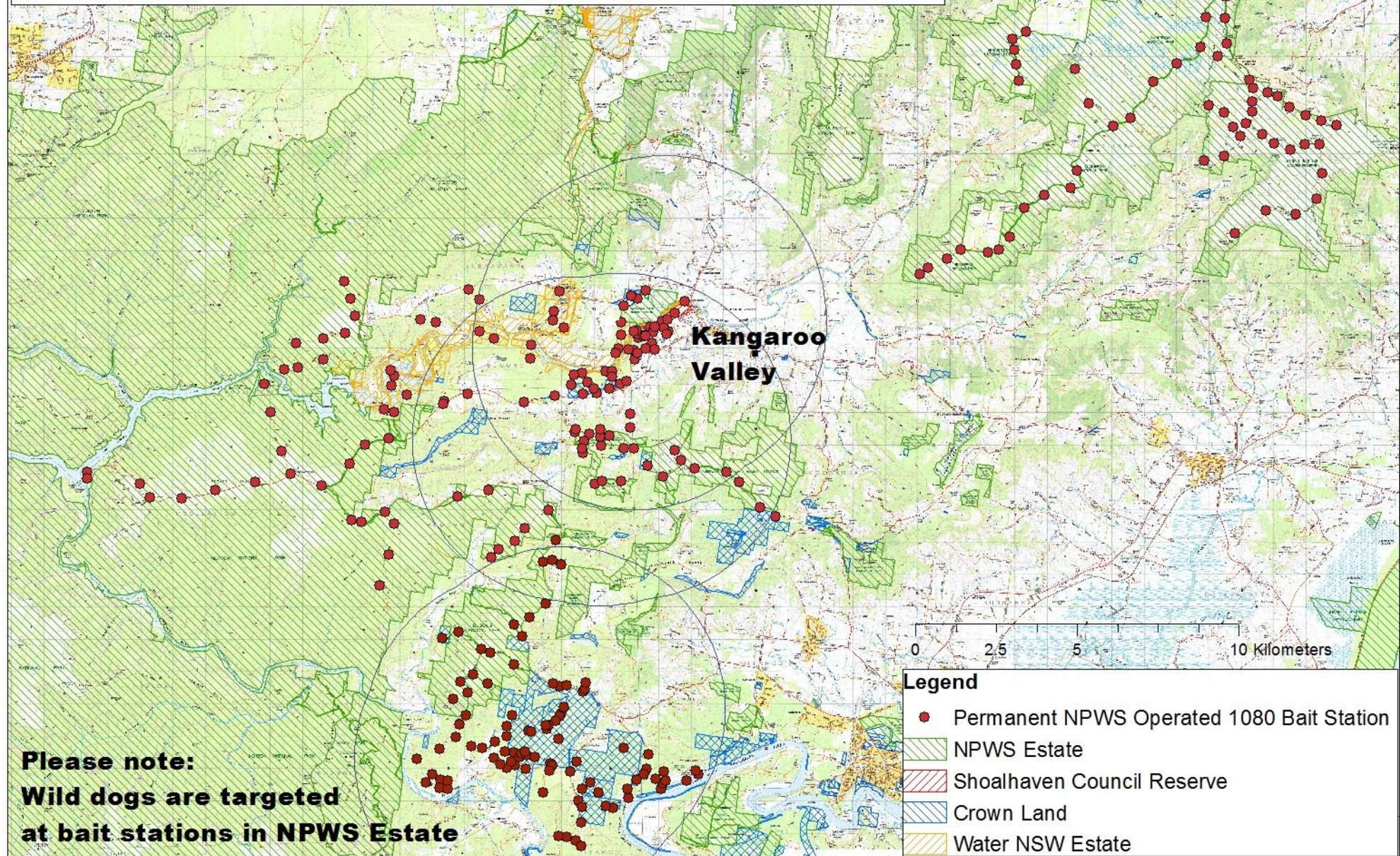
Broad scale, cross-tenure, integrated PREDATOR CONTROL
FOX & WILD DOG 1080 BAITING, SHOOTING & TRAPPING

Monitoring of BTRW and introduced predators in & around colonies

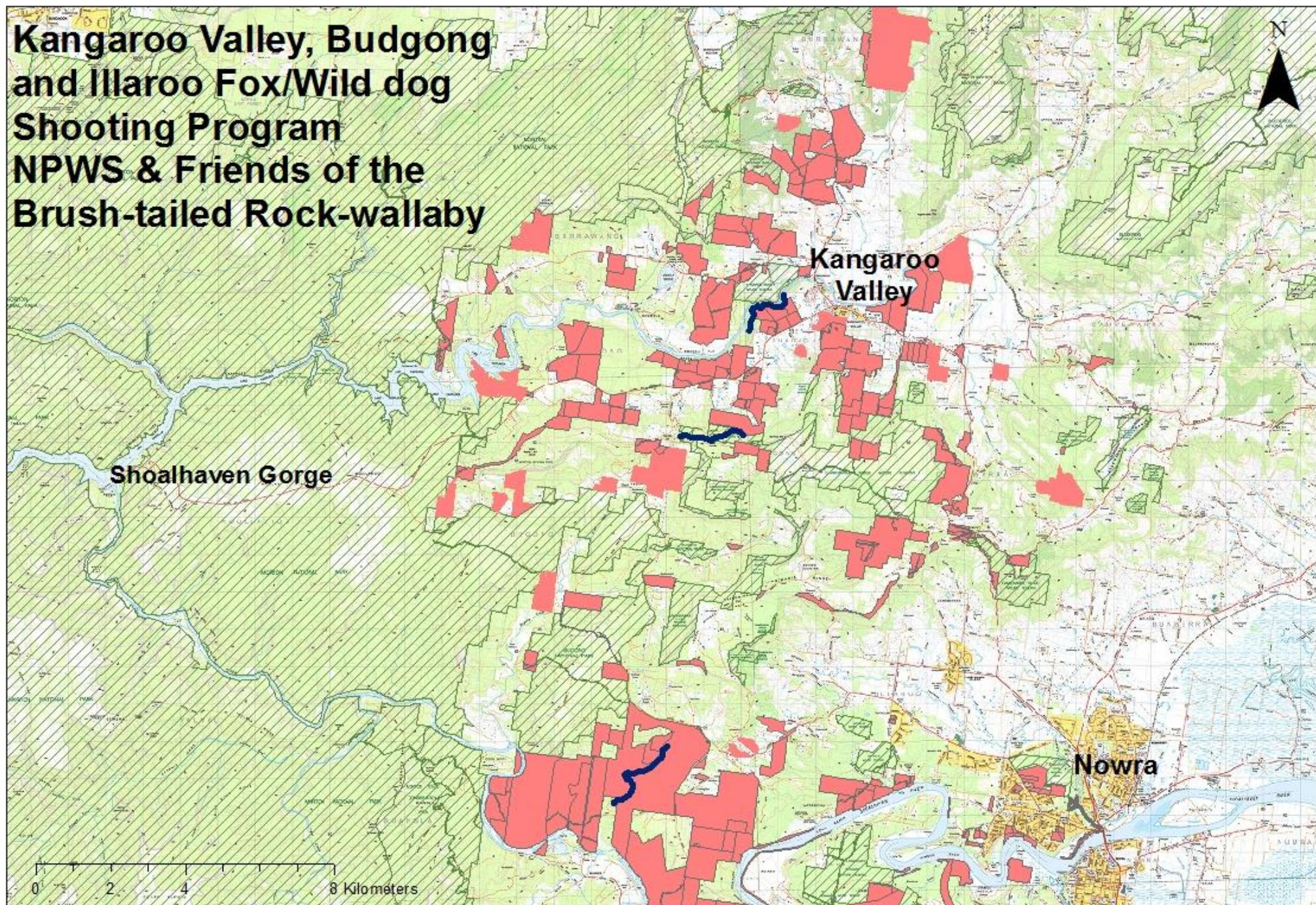
Release of captive bred and wild BTRW into SoS priority sites to help
restore some genetic diversity and build self-sustaining populations

Community engagement and school education programs
Managing weeds, fire, goats and cats

**NPWS Fox/Wild Dog Buried Bait &/or Ejector Stations
Permanently contain 1080 poison which is lethal to dogs
(please ensure pets remain on your own property)**



Kangaroo Valley, Budgong and Illaroo Fox/Wild dog Shooting Program NPWS & Friends of the Brush-tailed Rock-wallaby



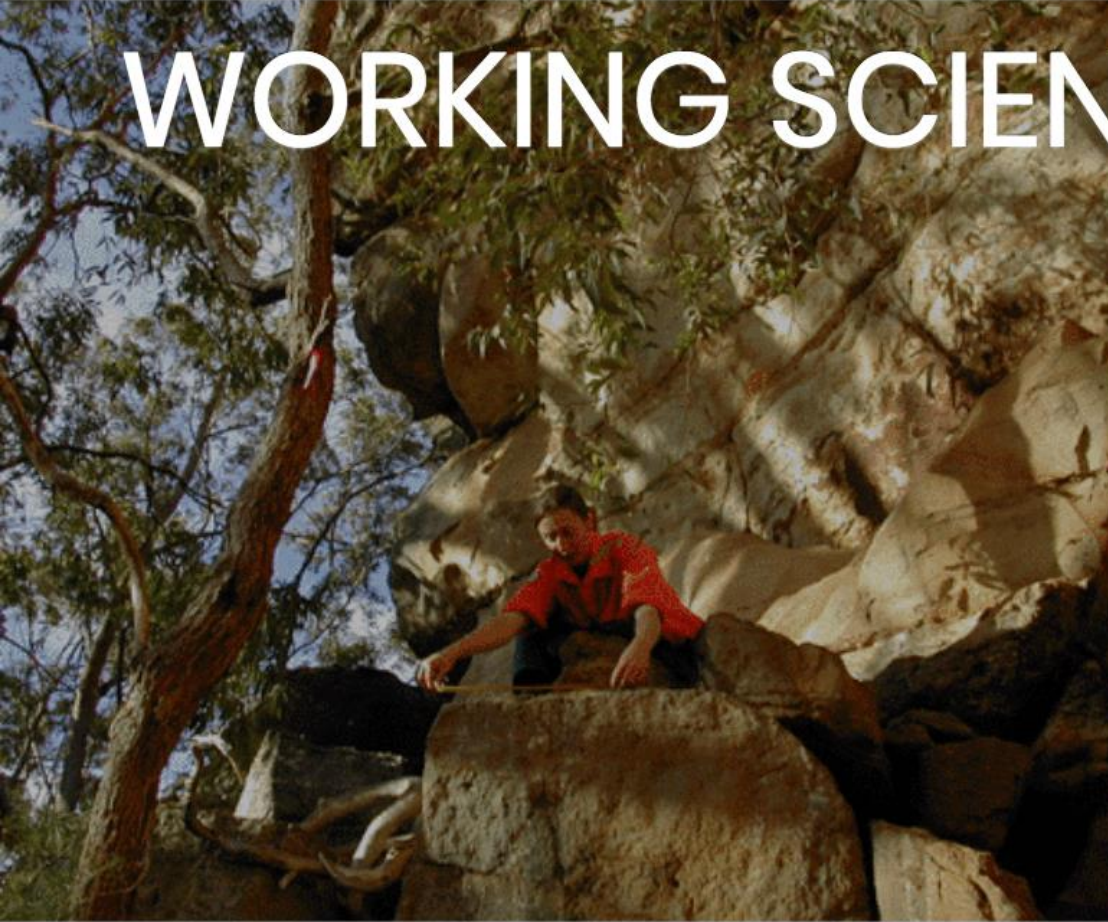
EFFECTIVENESS of threat abatement?

Conservation management
depends on
**EVIDENCE
BASED**
decisions



How do we accurately measure the relative abundance
of BTRW and their predators?

WORKING SCIENTIFICALLY



What are our questions? What are our predictions?

EXPERIMENTAL DESIGN



What raw data can we collect?
What is our monitoring methodology?

CONSTRAINTS of our experimental design



What can scats teach us?

WORKING TECHNOLOGICALLY



Strategically placed infra-red cameras have replaced Predator Sand Pad monitoring and BTRW Scat Plot monitoring

INDIVIDUAL BTRW IDENTIFICATION



has been continuously undertaken at the three
surviving Kangaroo Valley colonies for ten years







SMALL POPULATIONS are at great risk from inbreeding, drought, fire & fluctuations in sex-ratios

PREDATOR PIT

It only takes one fox to kill the few joeys produced each year in small colonies



Landholders near BTRW colonies assist with predator camera monitoring to allow timely targeted response





WORKING TECHNOLOGICALLY



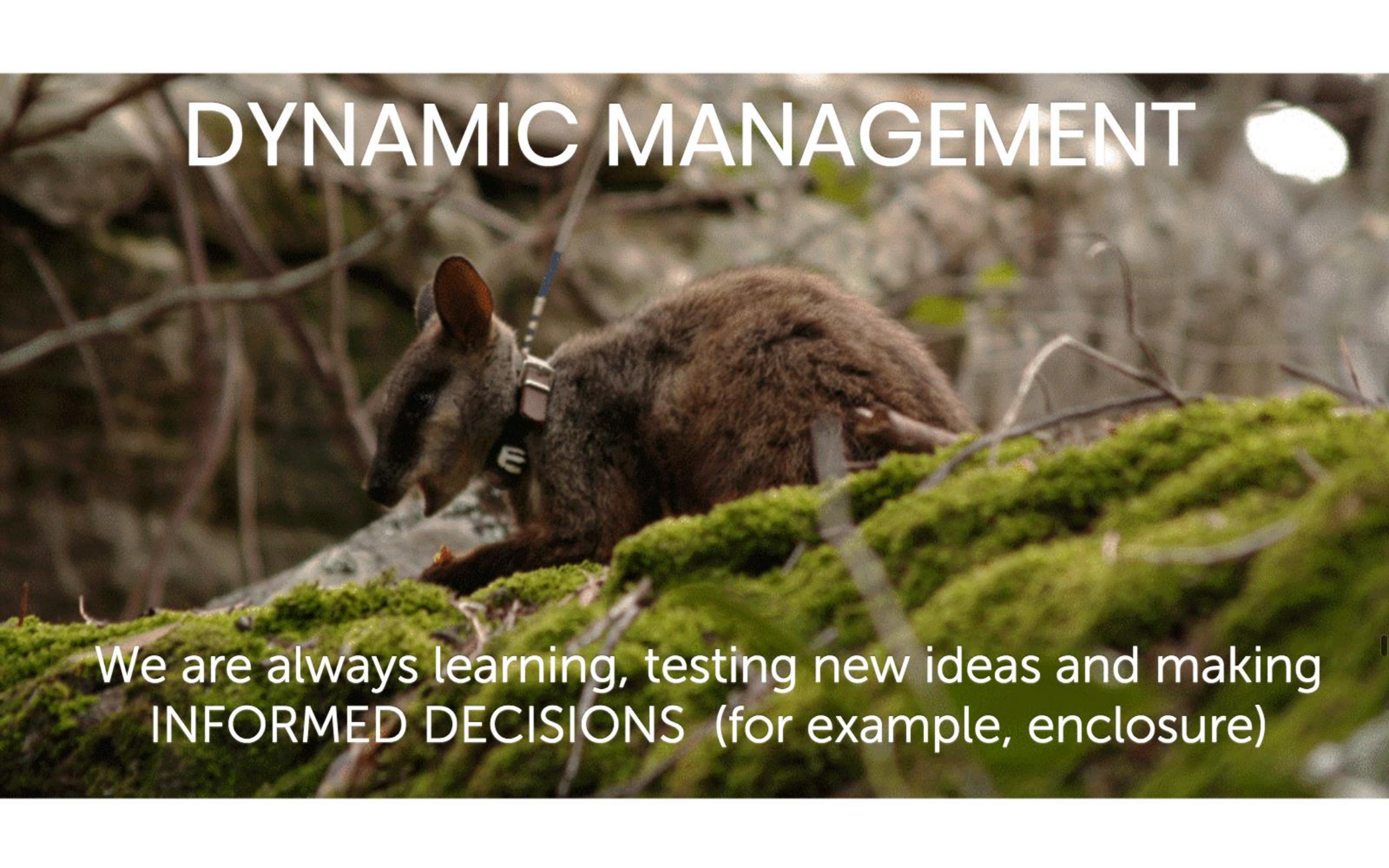
Radio-tracking of BTRW released into wild colonies



Translocation is stressful

Every threatened species recovery project has strengths and weaknesses

DYNAMIC MANAGEMENT

A close-up photograph of a squirrel perched on a thick, moss-covered tree branch. The squirrel is facing left, looking down. It has brown fur and a black collar with a small white tag. A blue leash is attached to the collar. The background is a blurred forest scene with bare tree branches and a bright light source in the upper right.

We are always learning, testing new ideas and making
INFORMED DECISIONS (for example, enclosure)



ROCKWALLABY .ORG. AU



We celebrate the project successes ...

ROCKWALLABY .ORG. AU



... and put on a brave face for the losses

RESULTS IN KANGAROO VALLEY

River colony just reached minimum for self-sustaining



- Creek & Mountain colonies awaiting BTRW for release
 - LESS FOXES
- MORE RECRUITMENT of joeys into adult population
 - INCREASED genetic diversity

BUT FUNDING IS UNCERTAIN YEAR TO YEAR



That is why fund & awareness raising by the FRIENDS is vital



BECOME A FRIENDS MEMBER

OR SYMBOLICALLY ADOPT A KANGAROO VALLEY ROCK-WALLABY

How can we get our community & politicians to actively protect our
UNIQUE BIODIVERSITY?



COMMUNITY ACTION is vital - EVERYONE can help

What other STRATEGIES do we have to PROTECT BIODIVERSITY from INTRODUCED PREDATORS?



Translocation & reintroduction of threatened species to predator-free islands, reserves or exclosures. BIOCONTROL?

Friends of the Brush-tailed Rock-wallaby have won numerous grants and awards for their



COMMUNITY ENGAGEMENT & SCHOOL
EDUCATION PROGRAMS SINCE 1995



Watch short video clips of the
Kangaroo Valley Rock-wallabies on the
Friends Channel



Find the Friends on Facebook



BefriendRockwallaby on Instagram



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Reference for Map of Rock-wallaby (*Petrogale*) taxa distributions across Australia. Map modified from Eldridge and Close (1993). Taxa are colored in accordance with their chromosomal groupings: the brachyotis group = red; the xanthopus group = yellow; the lateralis group = blue; and the penicillata group = green.

Chromosomal Speciation in the Genomics Era: Disentangling Phylogenetic Evolution of Rock-wallabies - Scientific Figure on ResearchGate. Available from: <https://www.researchgate.net/Map-of-rock-wallaby-Petrogale-taxa-distributions-across-Australia-Map-m...>