

Joining the Dots - Fiordland Ecosystem Restoration

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Acknowledgements

- Fiordland Biodiversity Team
- Community Partners
- Photographers: Graham Dainty, Barry Harcourt
- Sanctuaries Committee

Key Points

- **Joining the dots; Connectivity/linkage**
- Conservation success is all about people
- Mindset, perception of what is possible changing fast
- New tools and techniques



Fiordland Ecosystem Restoration

- 1.3 million ha
- 15% NZ conservation land
- Diverse ecosystems
- Iconic species

- Large ecosystem restoration and species management programme, 50+ sites
- Strong component of partnership with community and business
- One third of operating budget is contributed by community and business
- Numerous community projects and countless volunteer hours contributed
- **Linking up**



BDG SYNTHESIS



THE CHEEKY SOUTH ISLAND ROBIN IS FLYING HOME TO CHALKY ISLAND!

Last winter at ChalkyIslands we decided to walk our talk of totally digging New Zealand's environment by working with a major conservation project. Our aim was to relocate the vulnerable South Island robin back to its home turf of Chalky Island.

Chalky Island is a remote native bird sanctuary off the coast of Fiordland where some of New Zealand's most vulnerable and endangered birds enjoy a safe haven from dangerous predators. Chalky Island became the first ever island of its size to be successfully eradicated of predators in 1990 and since then has remained free of invaders of the josty kind. It is now the ideal home for vulnerable and endangered native species like the South Island Robin.

The values reflected in the restoration of Chalky Island really resonated with ours - to nurture and support our local environment (and we have to admit we LOVE the name).

New Zealand's South Island Robin numbers have been dropping for a while now due to introduced predators on the mainland and we really wanted to help give this cheeky little bird a fighting chance so we created a wooden pin badge from which all proceeds have gone to funding this initiative to this sanctuary.



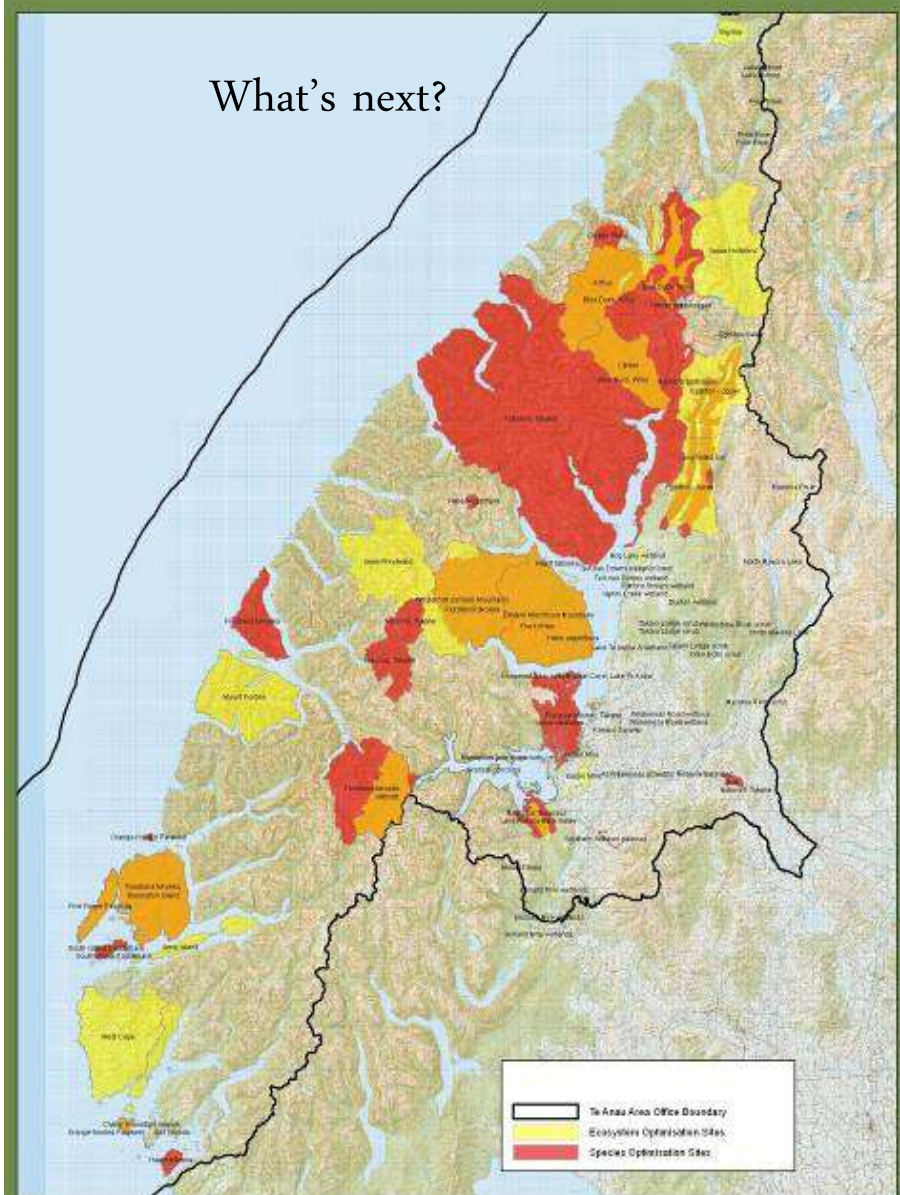
It has to be said, we owe you all a standing ovation for supporting our vision of protecting one of our vulnerable native treasures. To everyone that purchased one of our robin badges, we owe thanks down upon you, as the project has been a huge success and we are thrilled to say that the robin is going home (in March 2018).

So some very excited ChalkyIslands crew are travelling to Chalky Island with some robins intended for release next year - and to share our thanks and share the celebration we really want to take care of you with us. To be in for a chance to be a part of New Zealand's conservation history (and to win some cool swag) go to our mailing list page and sign up - its that easy!

Many thanks to the Fiordland Conservation Trust for making this possible.



Current Managed Areas Te Anau AO



Optimisation Sites Te Anau AO

- 100,000ha plus with active stoat control
- 7000 hectares of sustained rat control using grids of bait stations, and A24s
- 100, 000ha of aerial 1080 last year to control rats and possums
- Commercial venison recovery throughout
- Fiordland Wapiti Foundation, deer control over 200,000ha

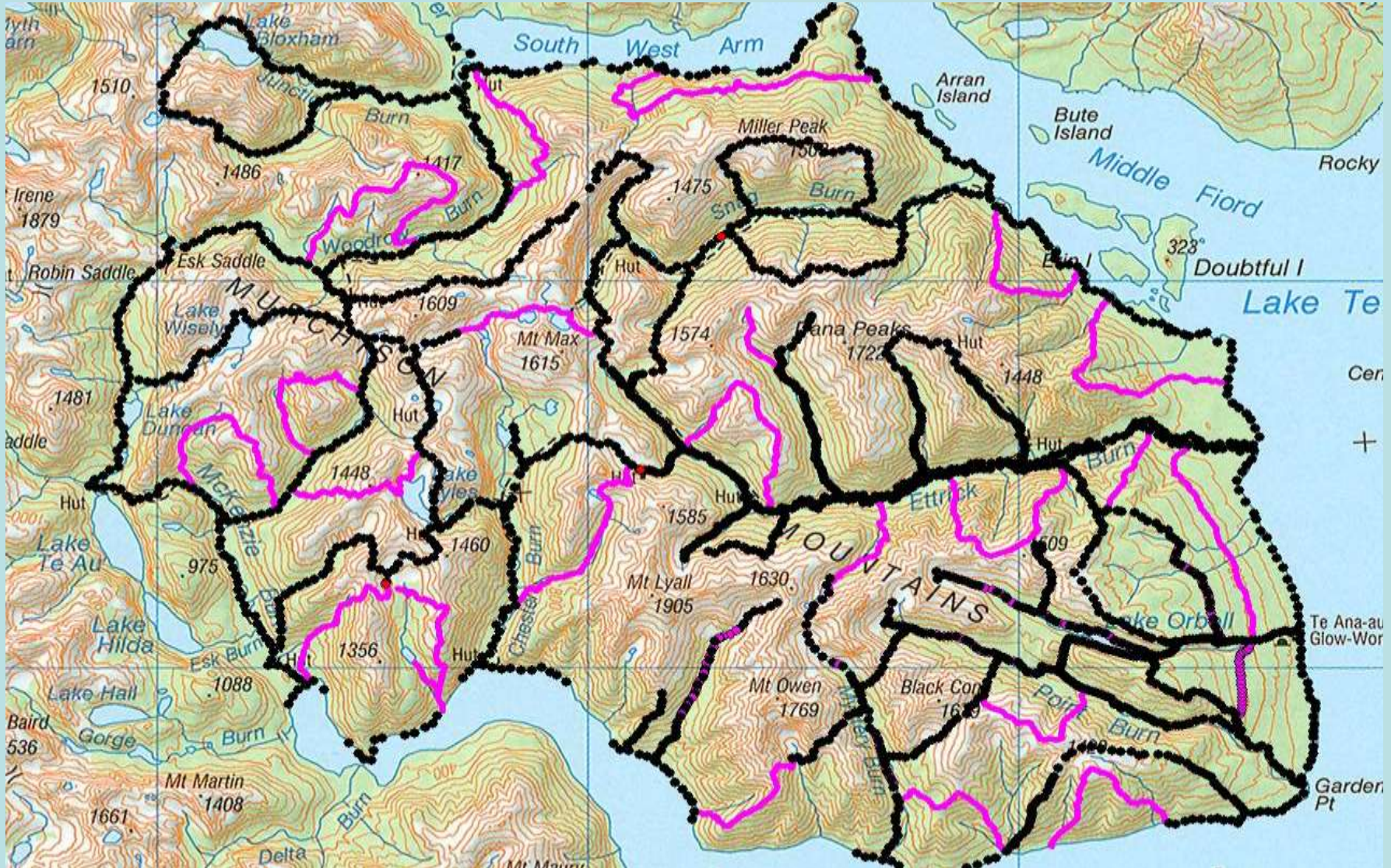
Challenges/Opportunities

- Topography
- Weather
- Access
- Scale
- Islands
- Peninsulas
- Iconic species/landscapes

Some of the sites

- Murchison Mountains
- Eglinton Valley
- Secretary Island
- Dusky Sound

Murchison Mountains, 50,000ha











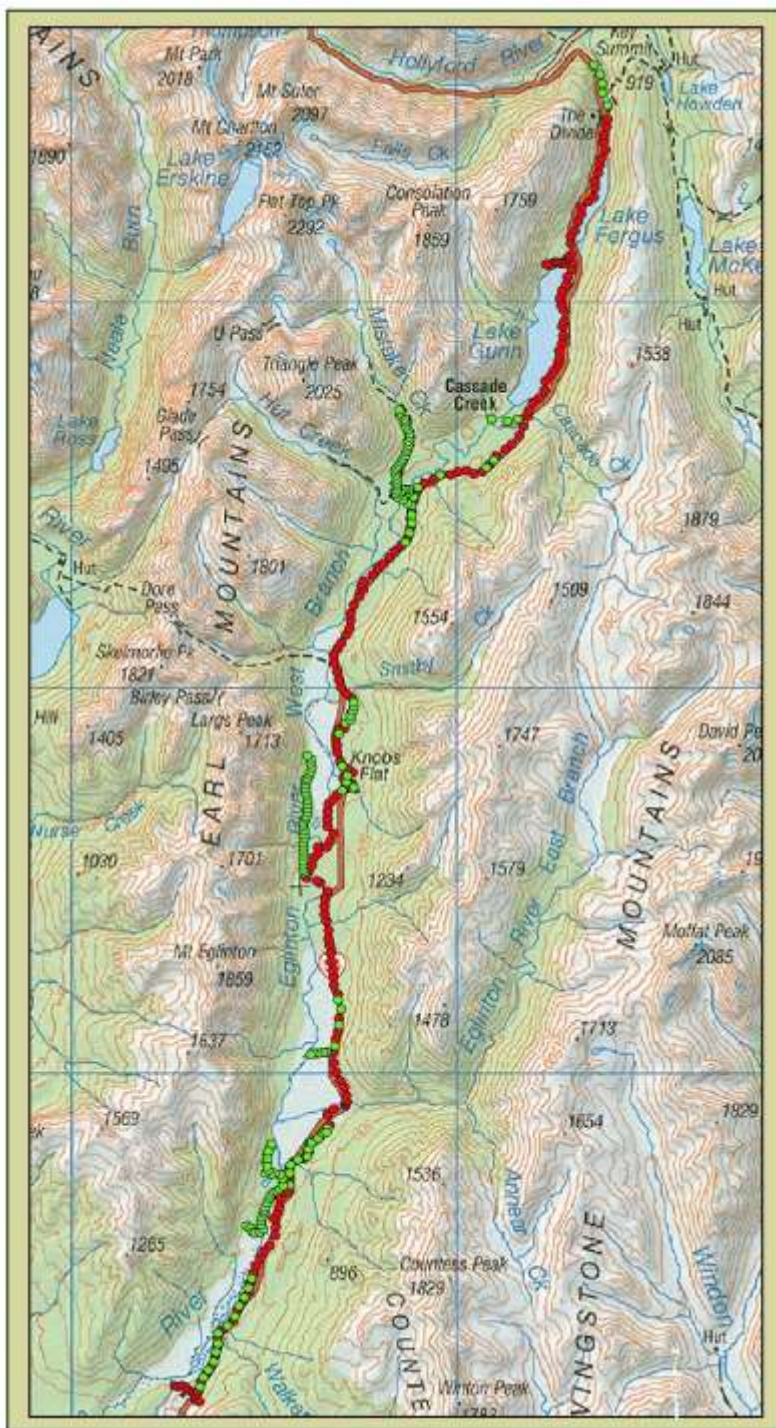


Learnings

- Stoat predation can be catastrophic for takahe
- Stoat control needed over whole 50,000ha
- 1 trap box/ 13 hectares
- 'Kea proof' box
- Multihook carousel
- Audit/QC/Weight Testing protocol

Eglinton Valley



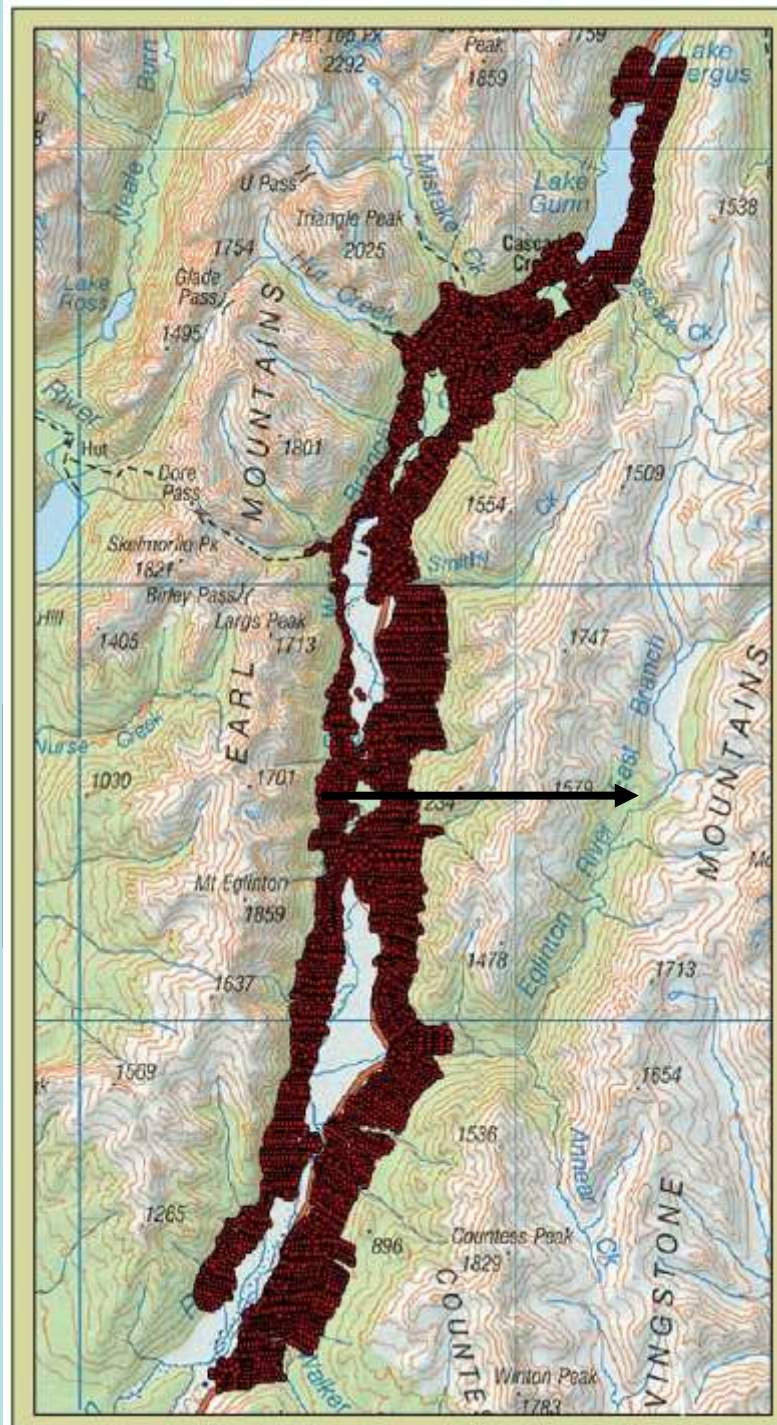


RAT CONTROL

4800ha

100 x 100m
grid

Pindone
pellets



Aerial 1080 100,000ha -undetectable rats & possums



EGLINTON- KEY THREATENED SPECIES

- Long-tailed bat
- Short-tailed bat
- Mohua (yellowhead)
- All nationally endangered



Learnings

- Rats successfully controlled to at or near undetectable levels using pindone over 6000ha
- Rat and stoat control has protected both bat species. One colony increased 4x
- Mohua nesting success
- Kaka nesting improved
- Large scale rat control achievable

Secretary Island-8100ha













- 680 deer removed since 2006 using
 - Individual hunters and indicator dogs
 - Helicopter hunting
 - Deer pens
 - Judas deer
 - Self attaching transmitter collars

- Trail cameras
- DNA
- 20 wily deer remained
- New technique needed



- Team hunting
- Rino GPS/radio
- Chasing dogs
- Tracking collars on dogs















DAY 6





DAY 8



DAY 9



Deer Free?



Learnings

- From DNA
 - stoat migration regular, deer infrequent
 - small numbers stoats breeding
- Achieved very low stoat densities, not eradication
- Multiple methods for deer eradication
- Team hunting more effective than individual



Dusky Sound Restoration



Breaksea Island
Site of rat eradication
SUCCESS



*Home to a third of the world's
kakapo*

21,000ha,
230 km of tracks, 2500 traps













*Sanctuary for mōhua and rock
wren - tokneka-tawaki - (tieke)*

Biggest influences on success

- Good people, right mindset
- Outcome focus, commitment
- Systematic and consistent approach
- **Quality assurance**
- Best Practice
- Adaptive management/innovation/
experimentation

Up coming

- More linkage between projects (Sanctuaries workshops!)
- Self resetting traps
- Long life lures
- Thermal imaging
- Drones
- Smarter technology
- More focus on mice





Finally

- Audit, check your gear regularly (Shinji's stoat trap weight testing Best Practice)
- Use best practice but also pursue innovation and adaptive management
- **Seek opportunities to link with others**