

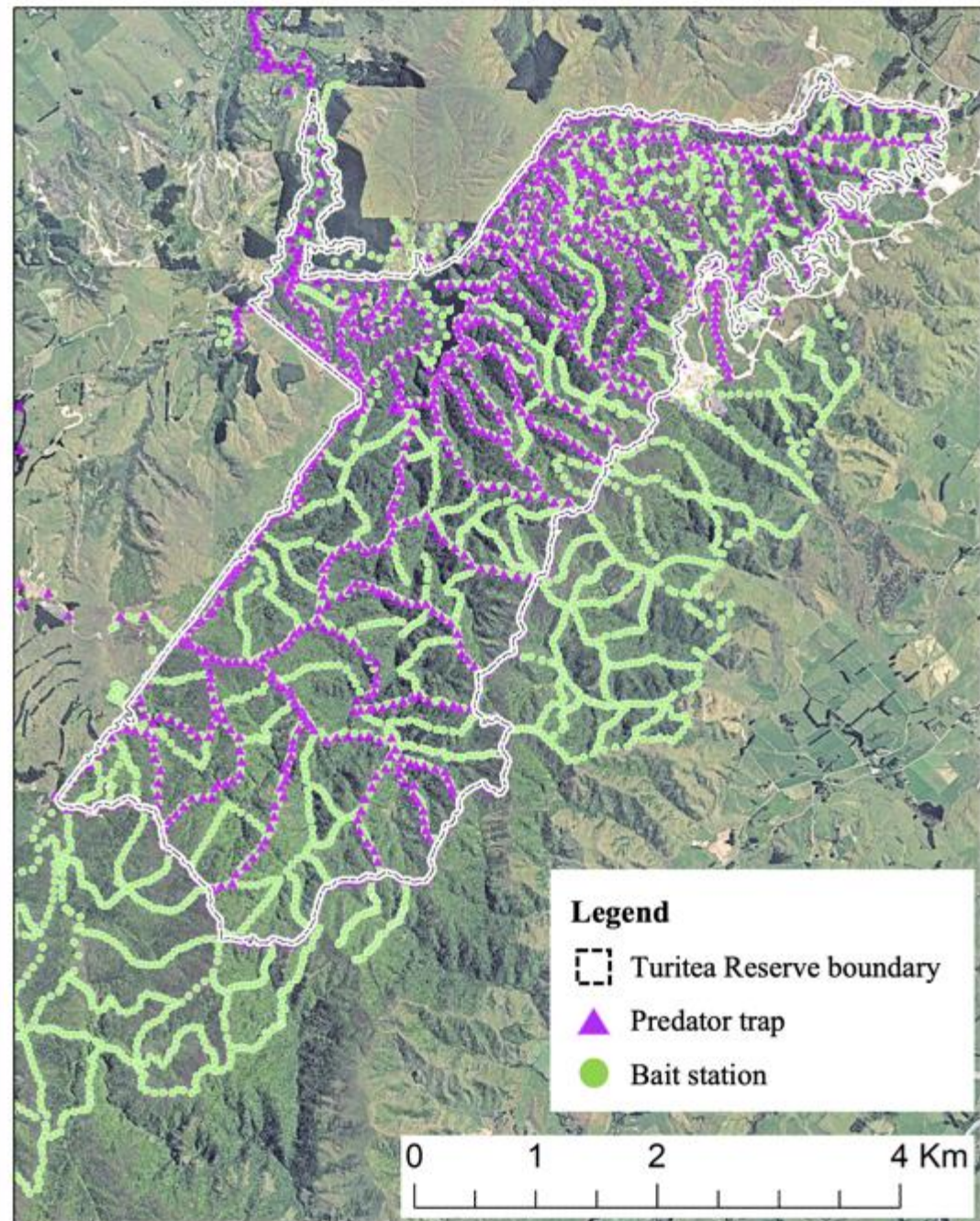
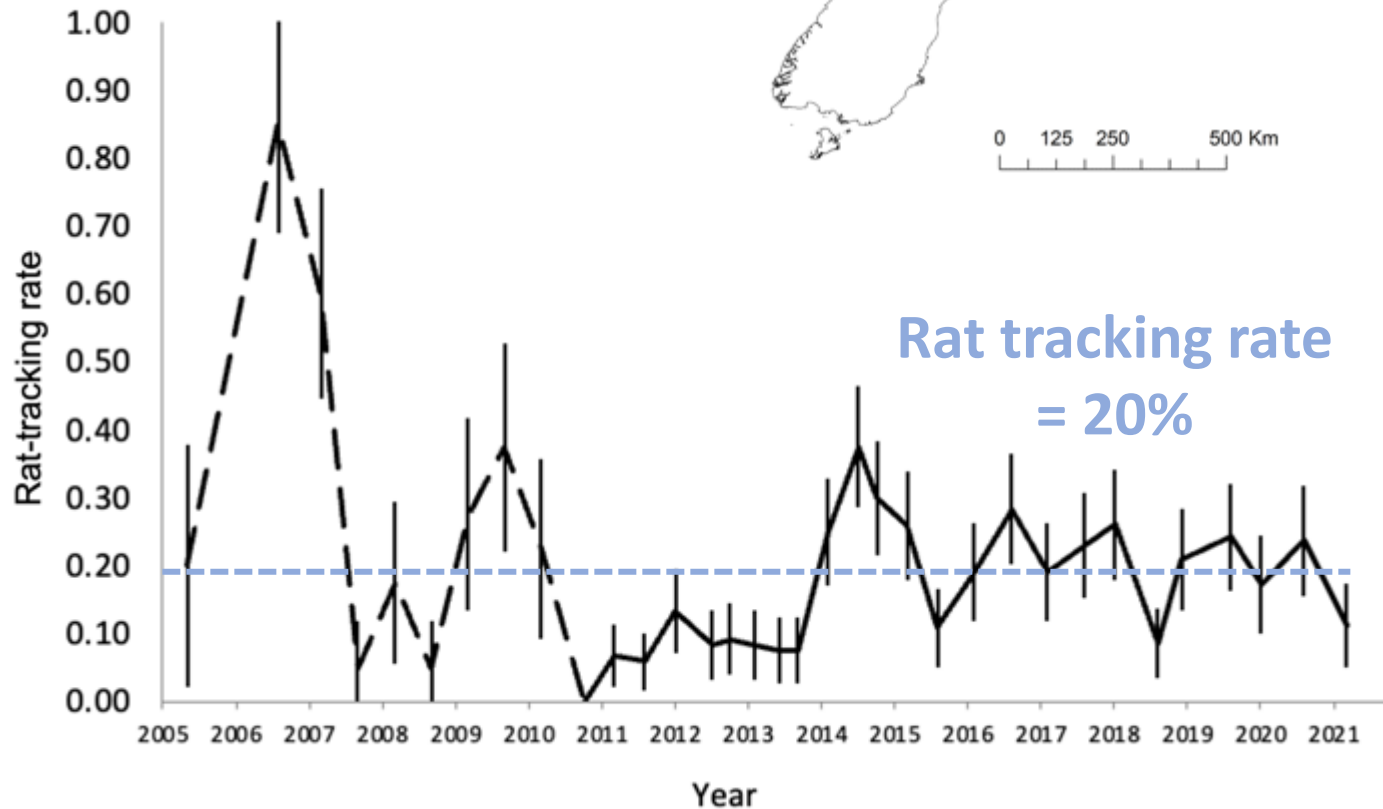
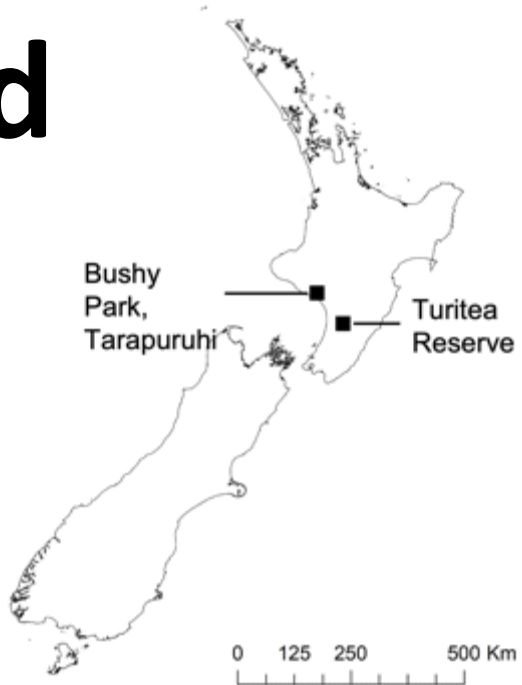
Improving translocation outcomes through monitoring and adapting management

Kara Macdermid, Zoe Stone, Doug Armstrong

Massey University



Background



Background

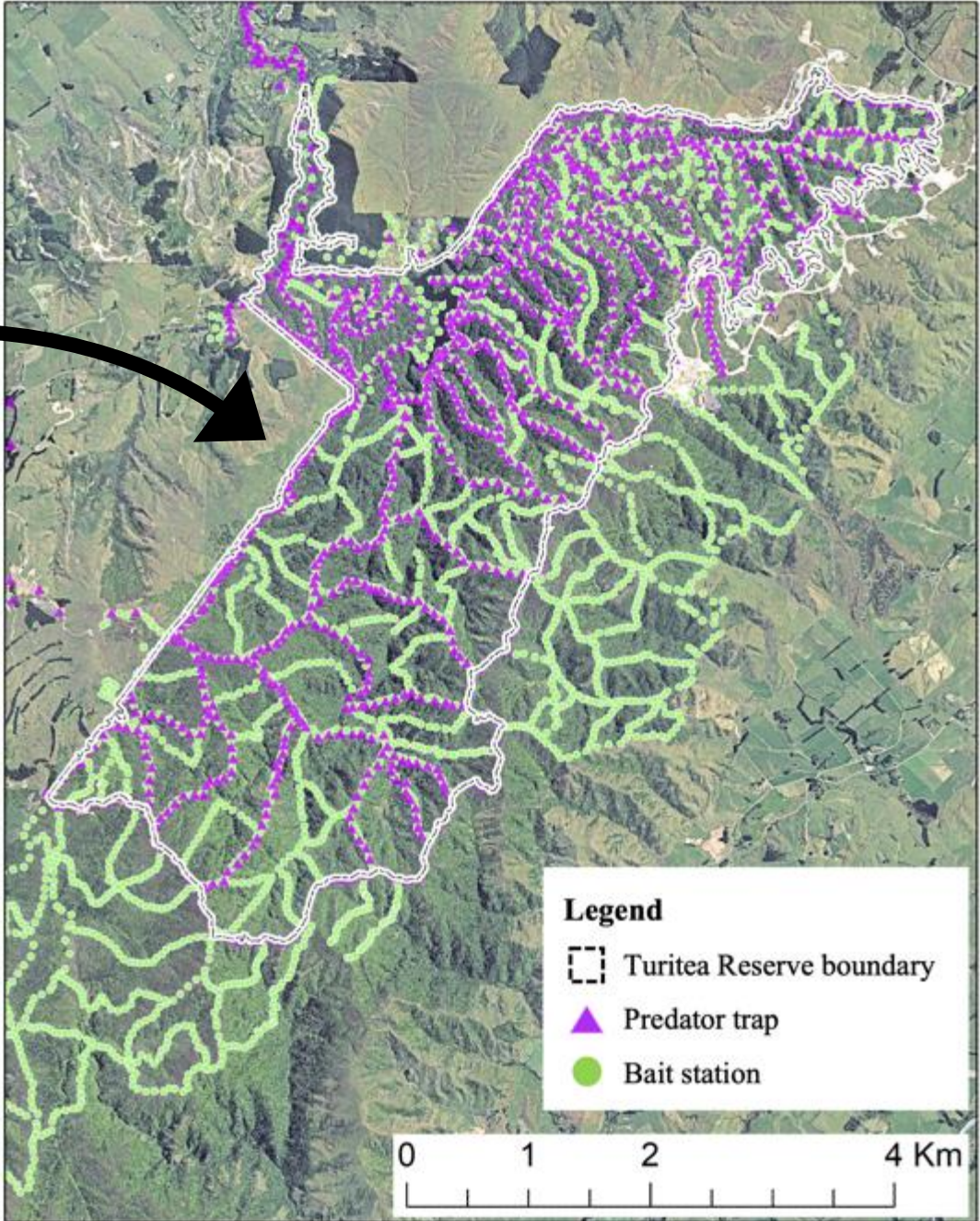
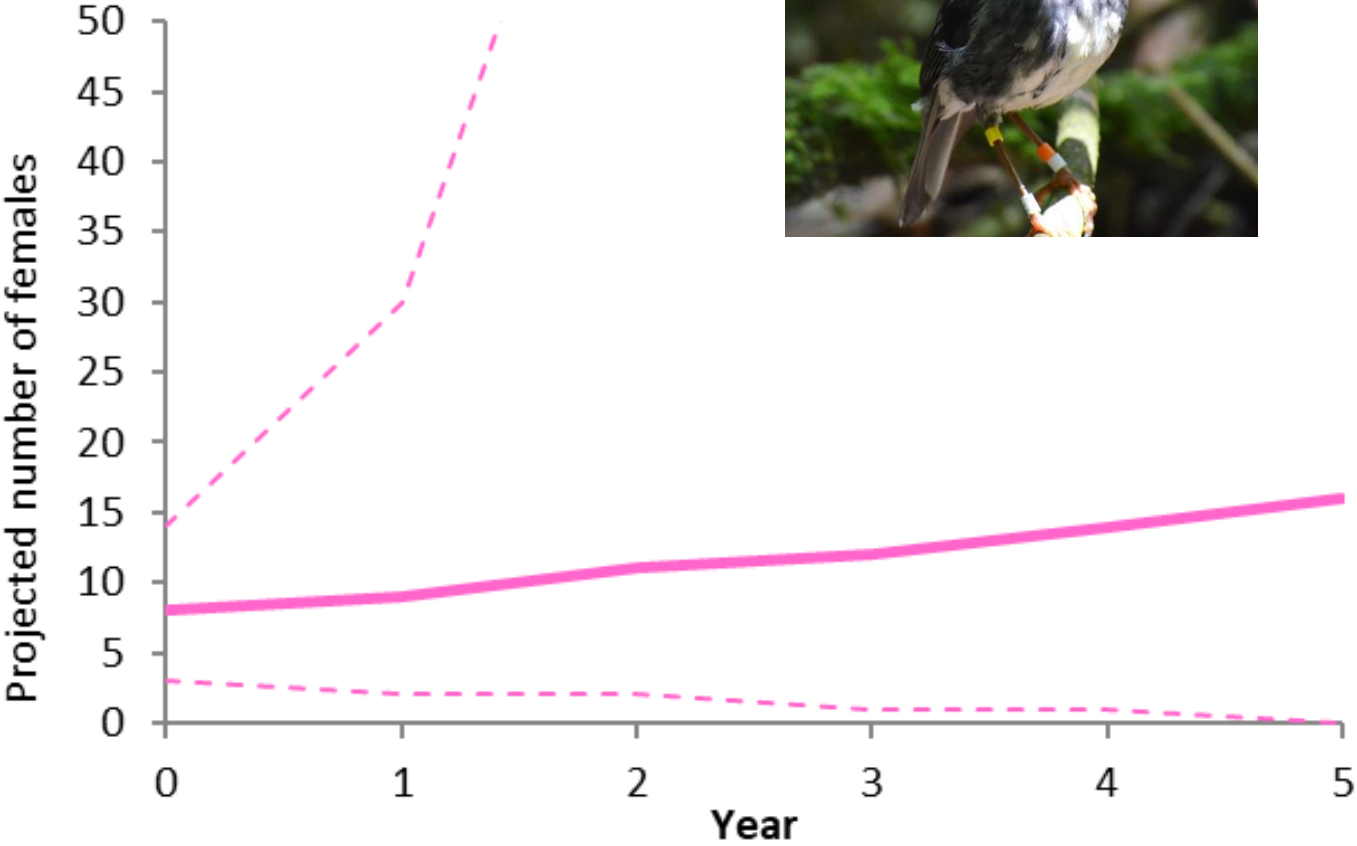




Image credit: PNCC

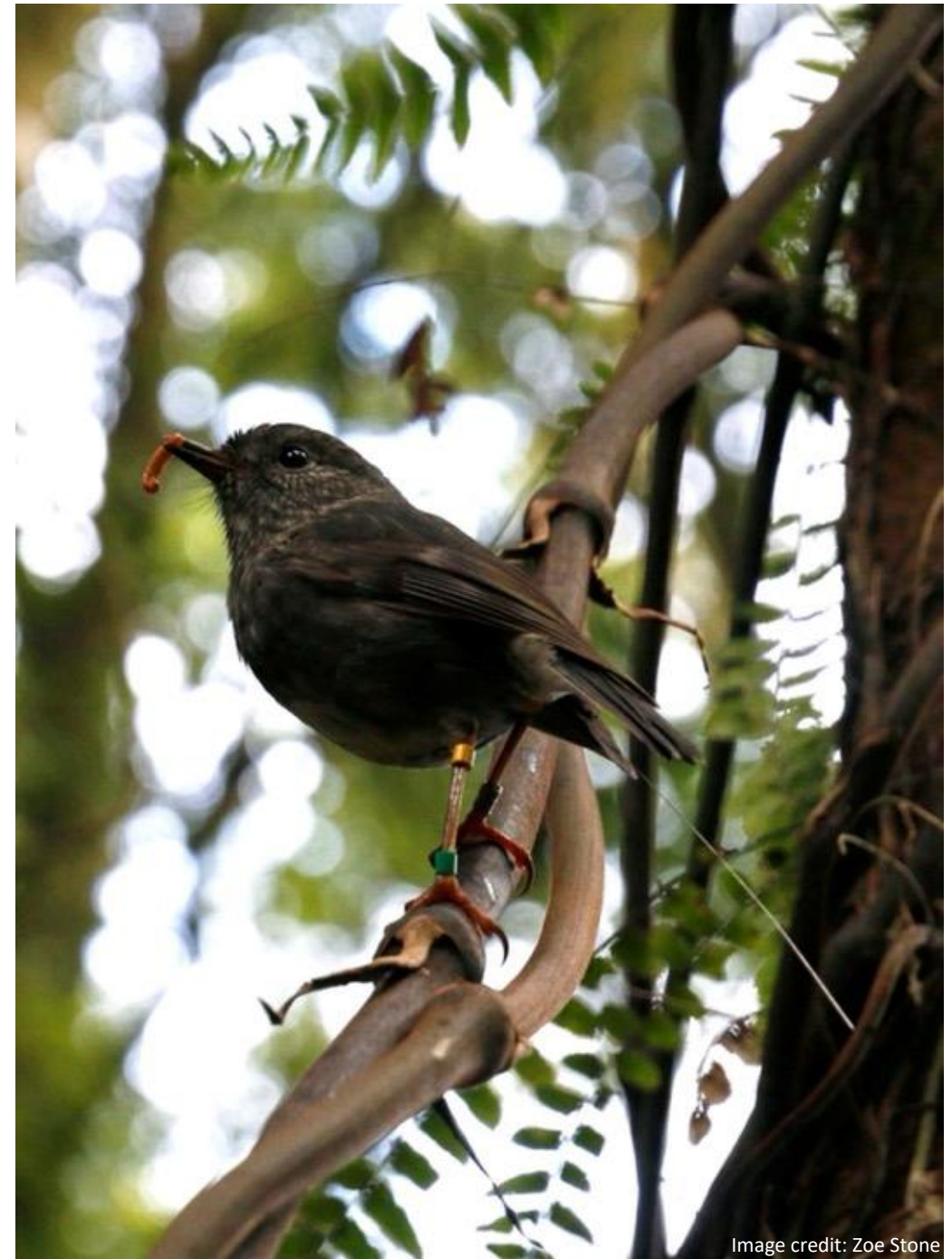
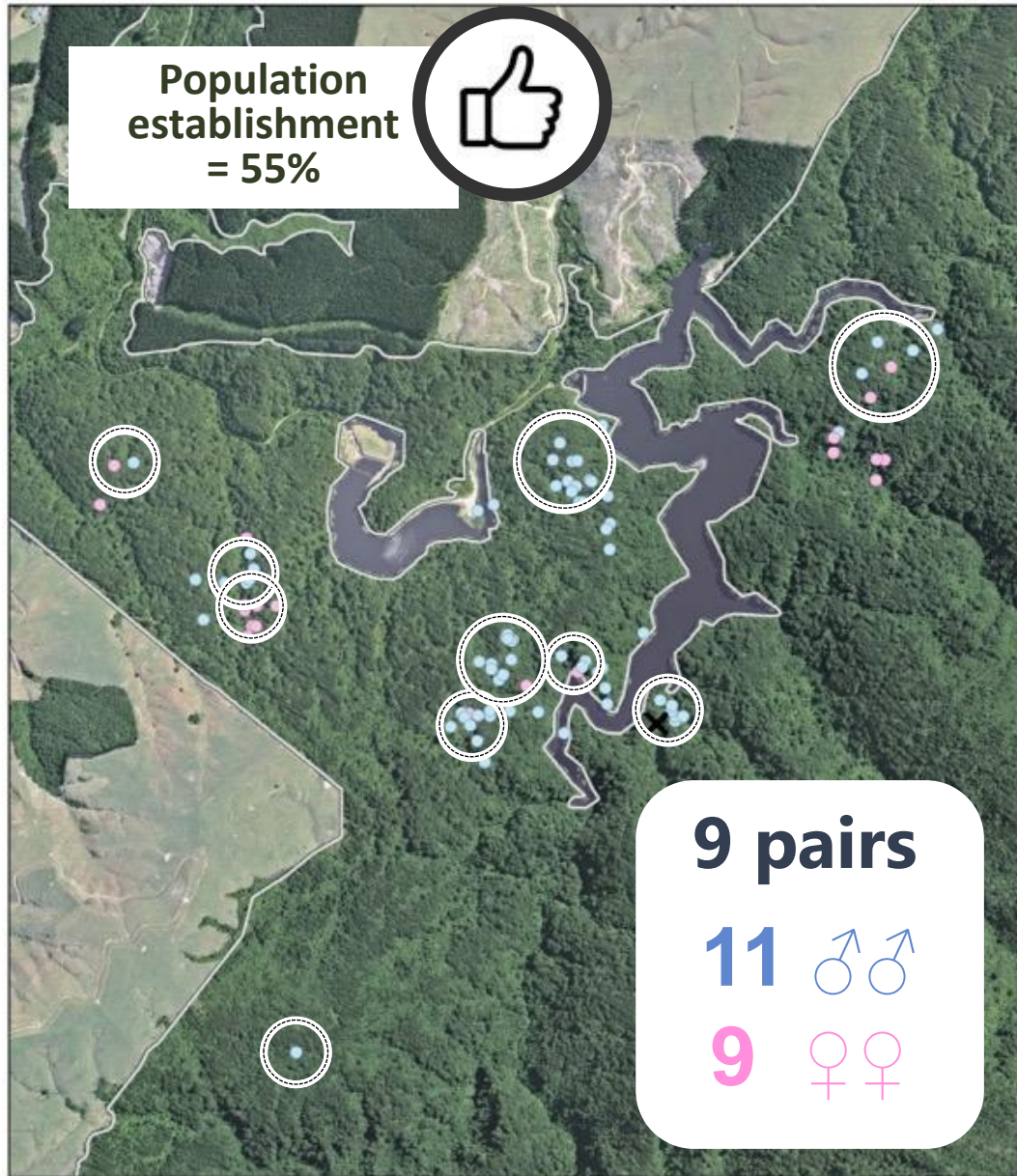


Image credit: Zoe Stone

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Year one



High adult death rate

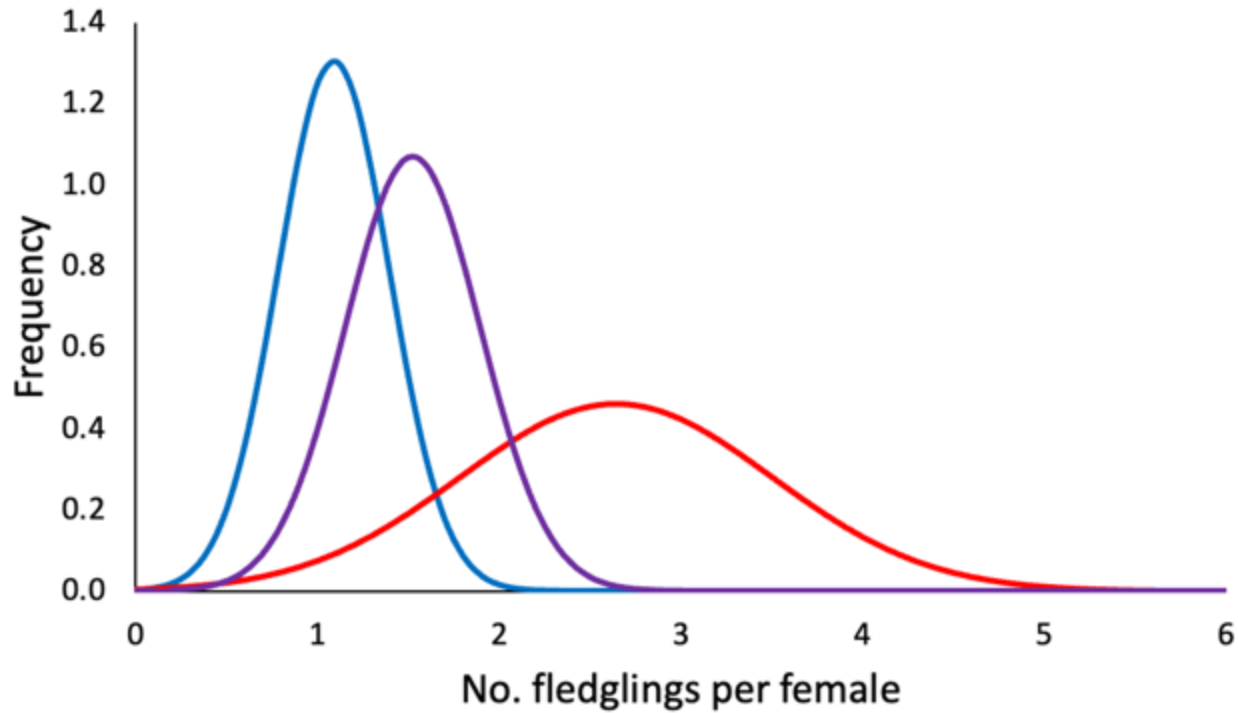
6/19 nests successful

11 fledglings

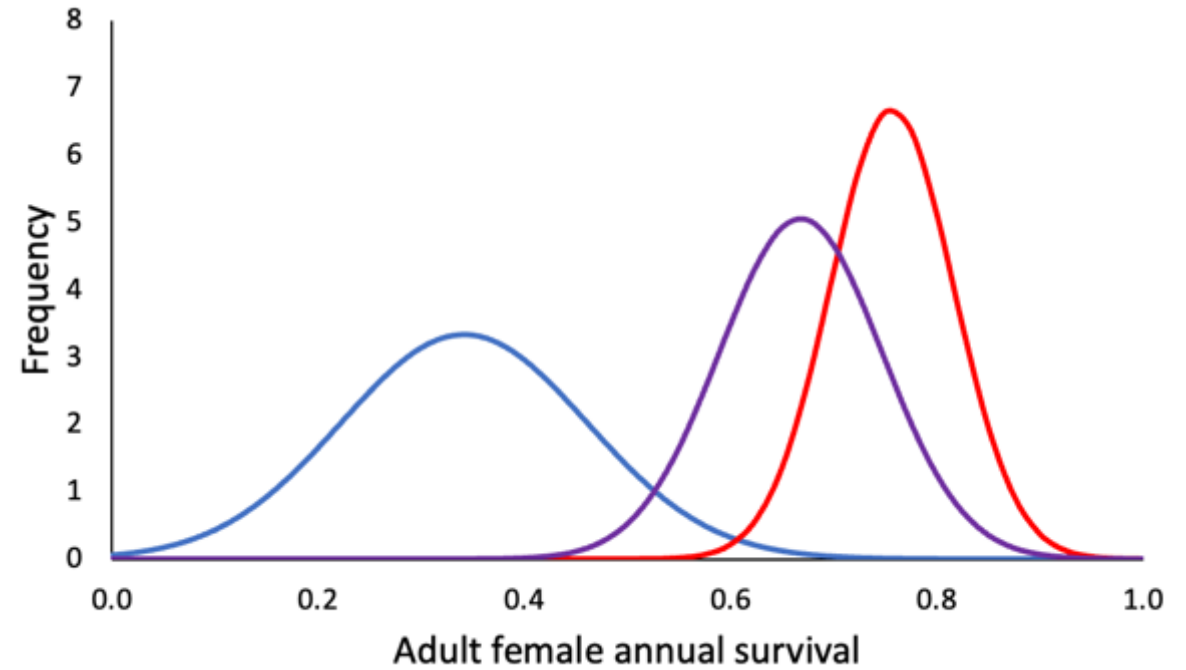


Updating models

- Turitea
- Prior
- Combined

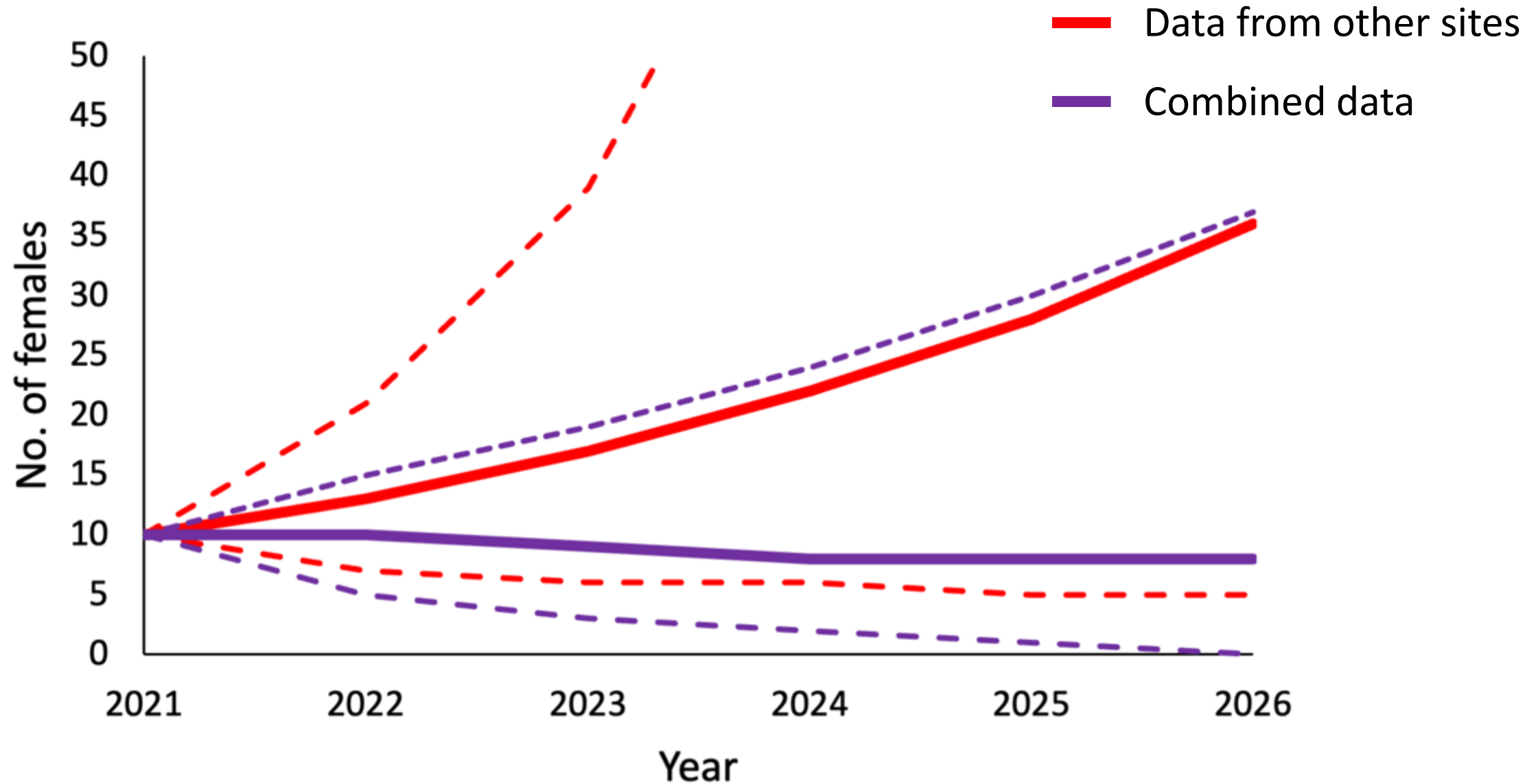


Reproduction



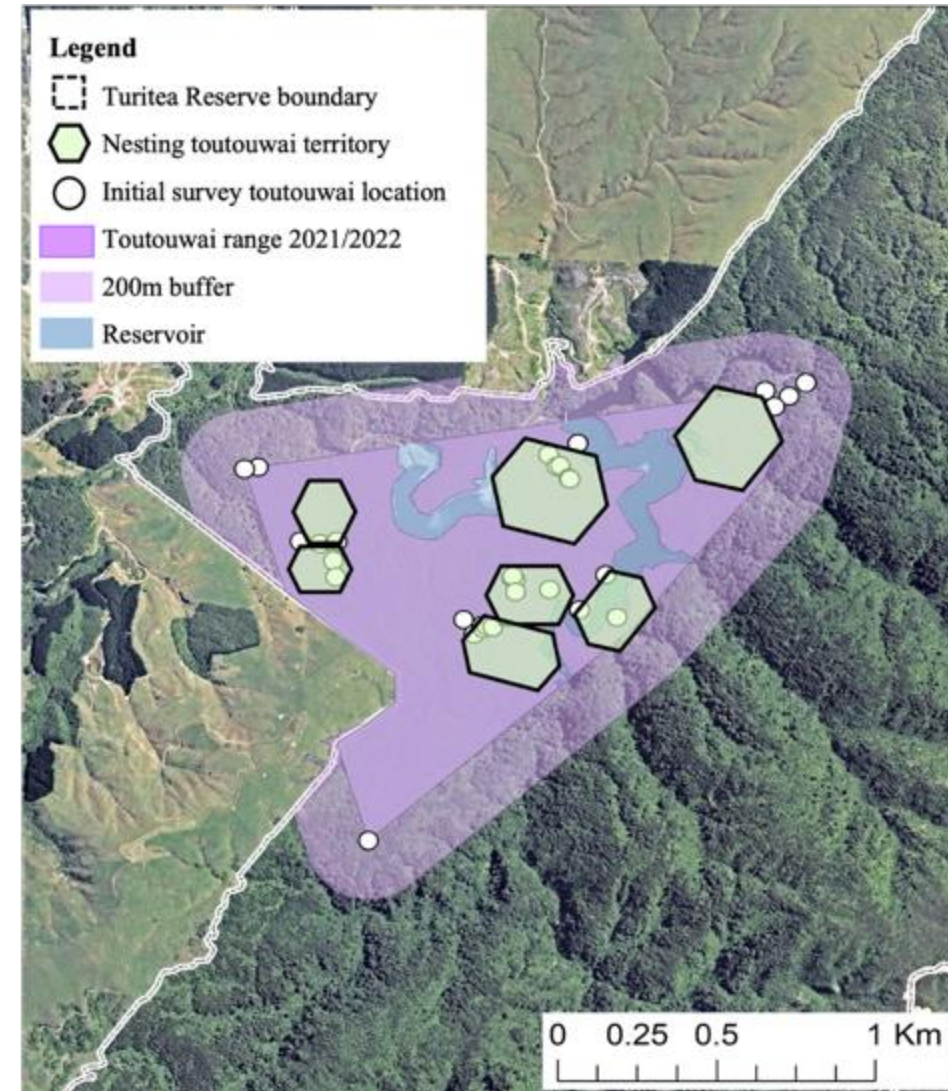
Survival

Population predictions



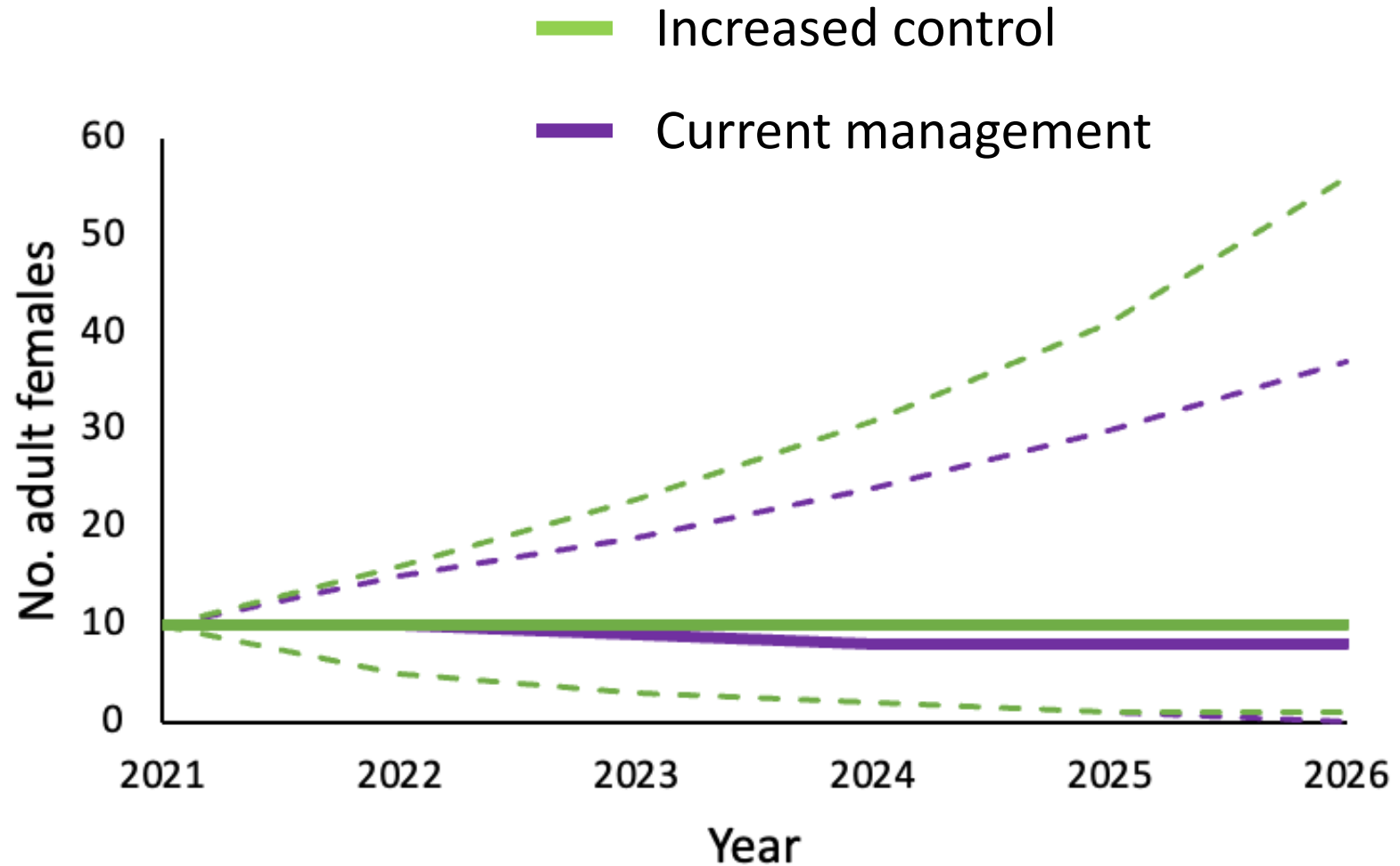
What to do?

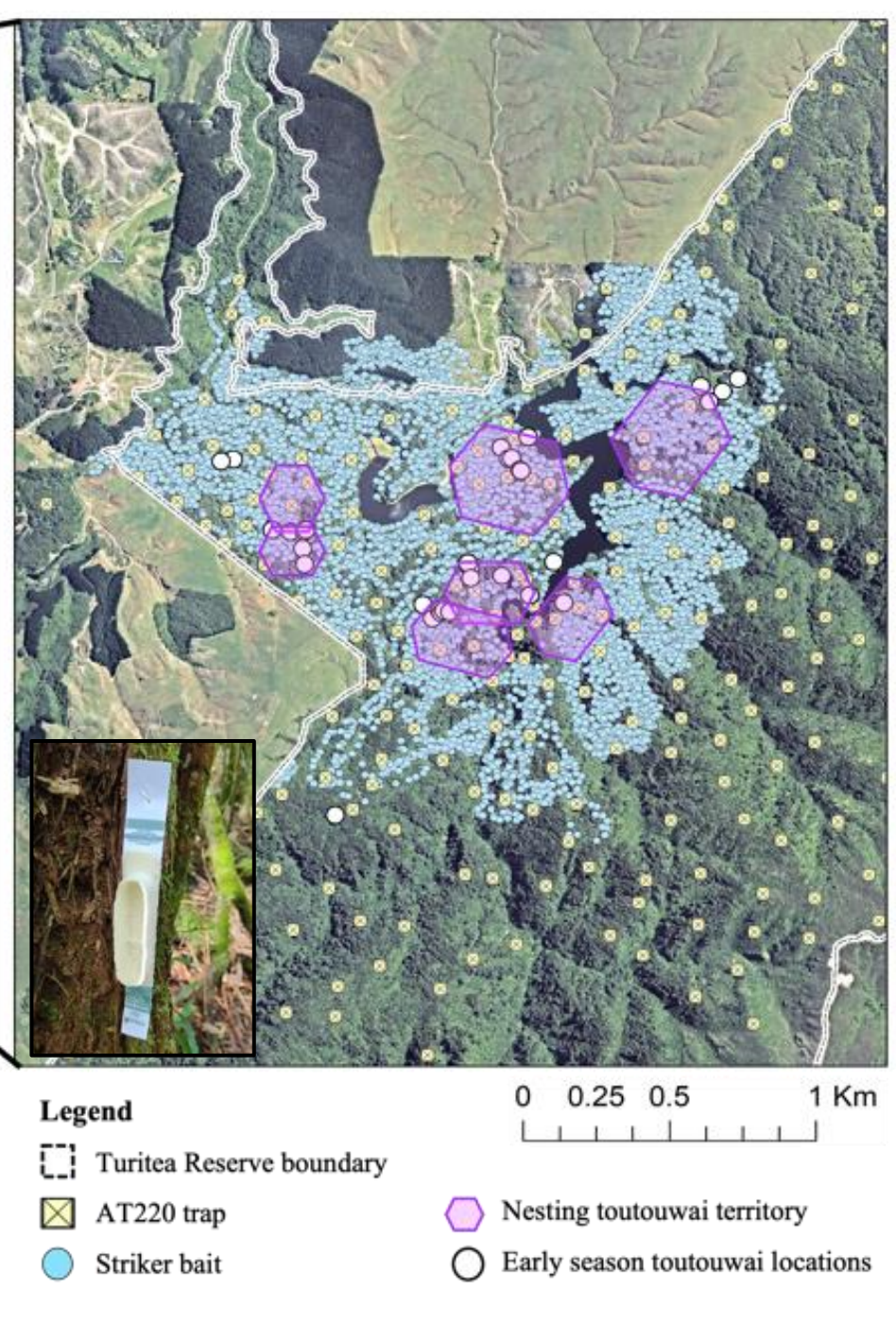
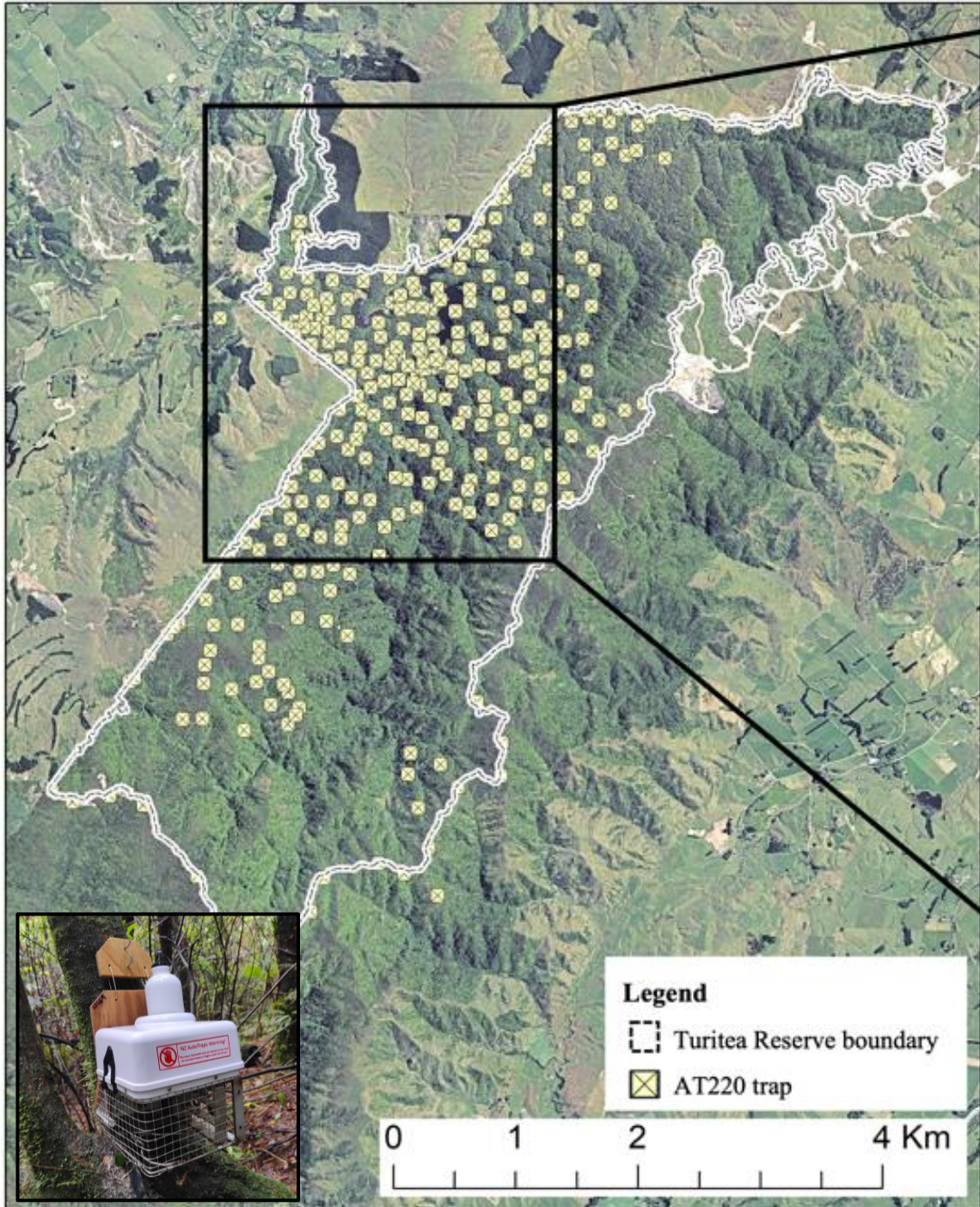
	Management Alternative	Rat tracking rate	Predicted number of females (2026)	Annual cost increase (\$)
1	Status quo	0.24	8 (0–37)	0
2	Reserve wide control	0.05	10 (1–56)	Very high
3	Core area control	0.05 in lower reserve	10 (1–56)	High



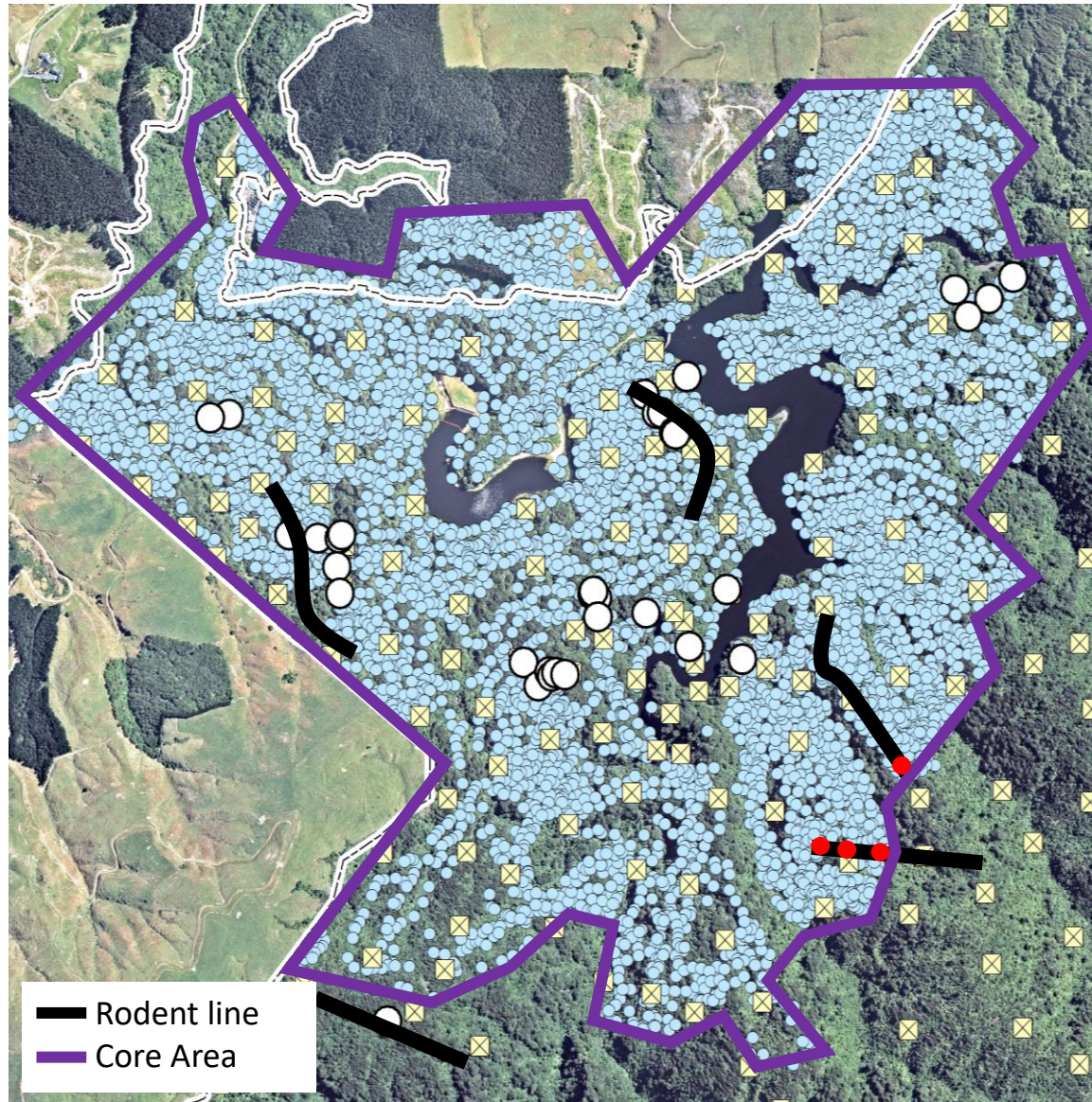
Predictions under alternatives

	Management Alternative	Rat tracking rate	Predicted no. of females (2026)
1	Status quo	0.24	8 (0–37)
2	Reserve wide control	0.05	10 (1–56)
3	Core area control	0.05 in lower reserve	10 (1–56)





Year two – Rodents



Mouse numbers ↓ initially

Rat tracking rate ↓ over summer

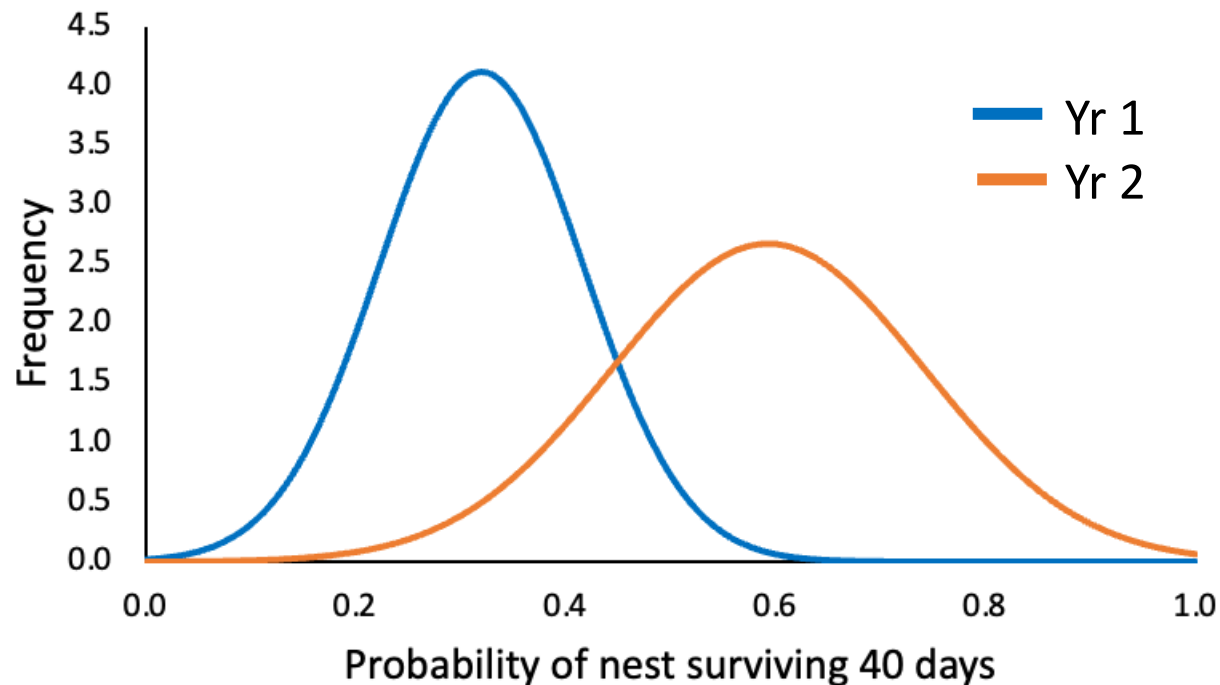


Year two – Toutouwai

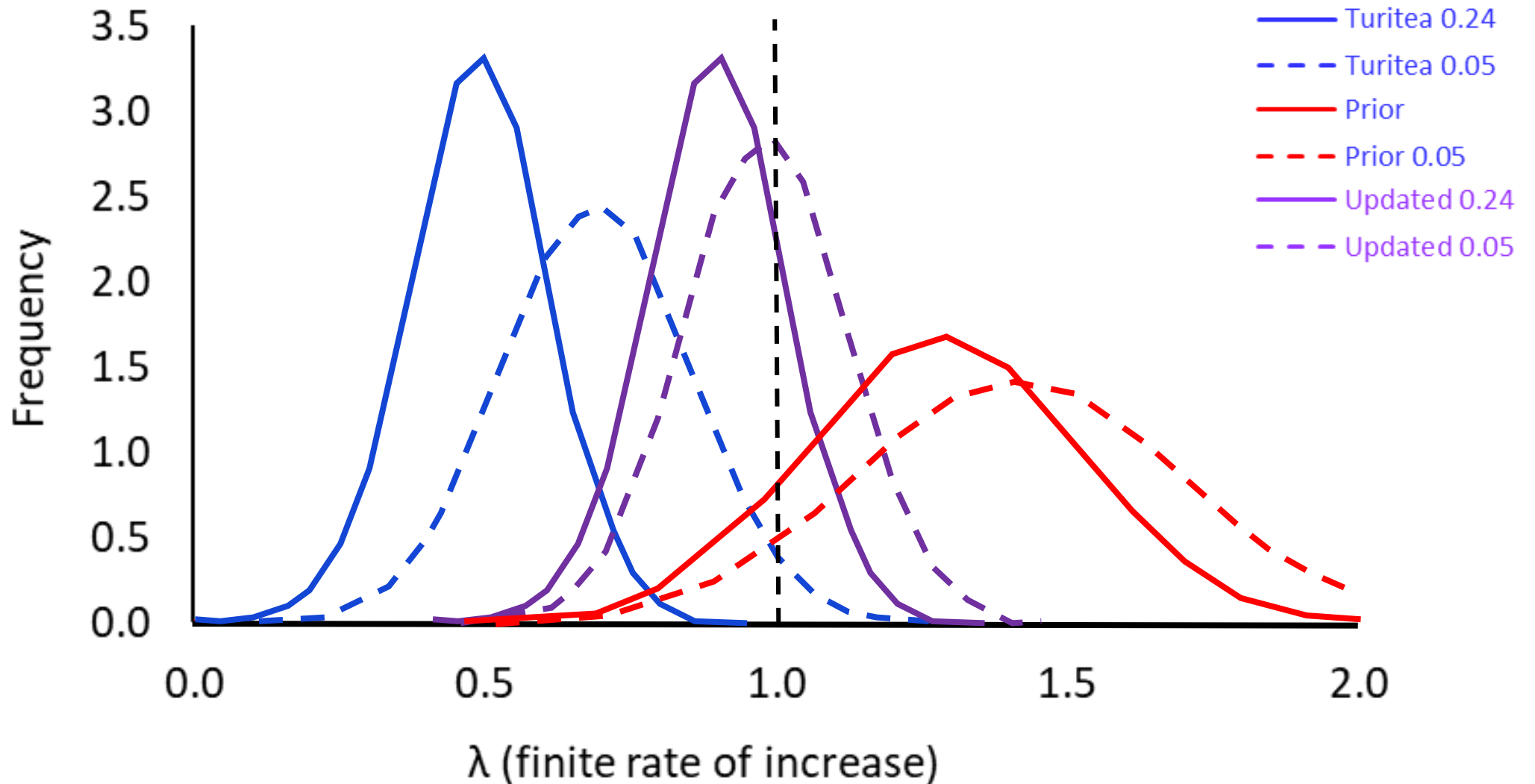
Higher adult survival

Half the number of females produced more fledglings

Much higher nest success (8/11)



Year two – Updating models

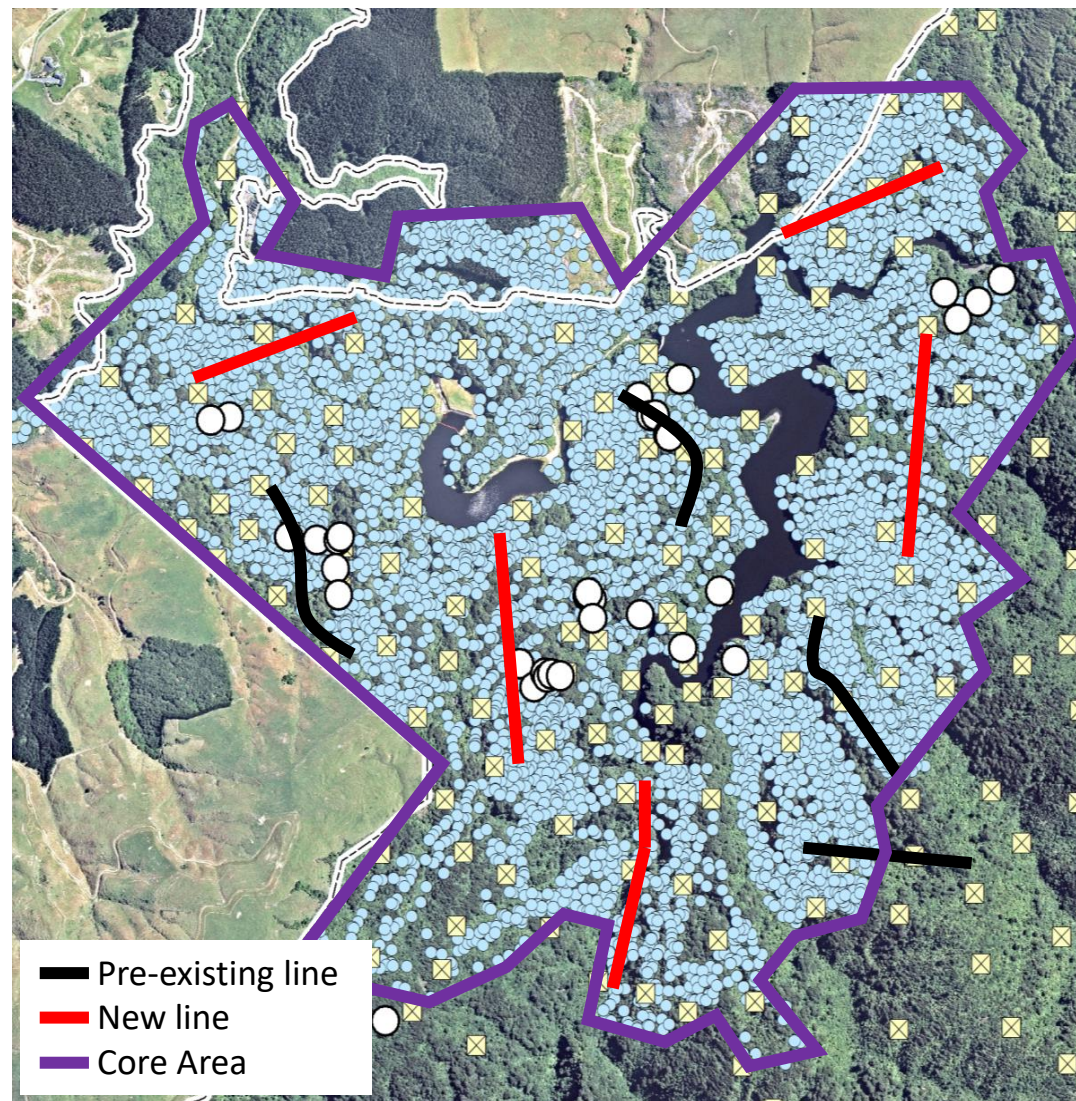


Reconsidering management

Continuing with higher levels of pest control



Continuing monitoring toutouwai



Improving rodent monitoring in core area

Thank you!

Zoe and Doug!

Rangitāne o Manawatu - Paul
Horton and Becc

Nгаа Rauru Kiiitahi

PNCC – Adam Jarvis

Bushy Park Tarapuruhi – Mandy
Brooke

Daniel Ritchie Contracting

Kevin Parker

