



Takahē Sanctuary Sites

Maximising the value of the takahē metapopulation – how 17 Sanctuary Sites are underpinning the recovery of takahē in the wild.



TAKAHĒ MANAGEMENT TEAM

- > Share same upper management as kākāpō (Ops Manager/scientist)
- > 6.5 fulltime equivalent takahē staff
- > Takahē are a taonga species of Ngāi Tahu and decisions are made together
- > Fulton Hogan has been sponsor of the programme since 2016



RECOVERY GOALS

- > Restoration of wild takahē populations within their historic range.
- > Creating sustainable recovery, both in terms of natural population stability and energy/resource requirements
- > Building awareness of the species and their contribution to functioning grassland ecosystems
- > Entire Recovery Programme is designed to enable safe and robust testing of available systems, tools, and processes.
- > I.e., finding that 'goldilocks zone' where quality takahē habitat overlaps areas where pests can be managed below set thresholds.



WHERE ARE ALL THE TAKAHĒ?

- Three 'Recovery Sites'
 - *Murchison Mountains – site of rediscovery and largest population (~250)*
 - *Kahurangi (Goulard Downs)*
 - *Whakatipu (Greenstone Valley)*
- Seventeen Sanctuary Sites (metapopulation)
 - *Insurance (genetic bank and ~40 breeding pairs)*
 - *Productive – 20+ birds growth p.a. for wild release*
 - *Advocacy*
- Burwood Takahē Centre
 - *Largest managed population (~100)*
 - *Intensive nest and pair management*
 - *Genetic bank*
 - *Training for the wild*

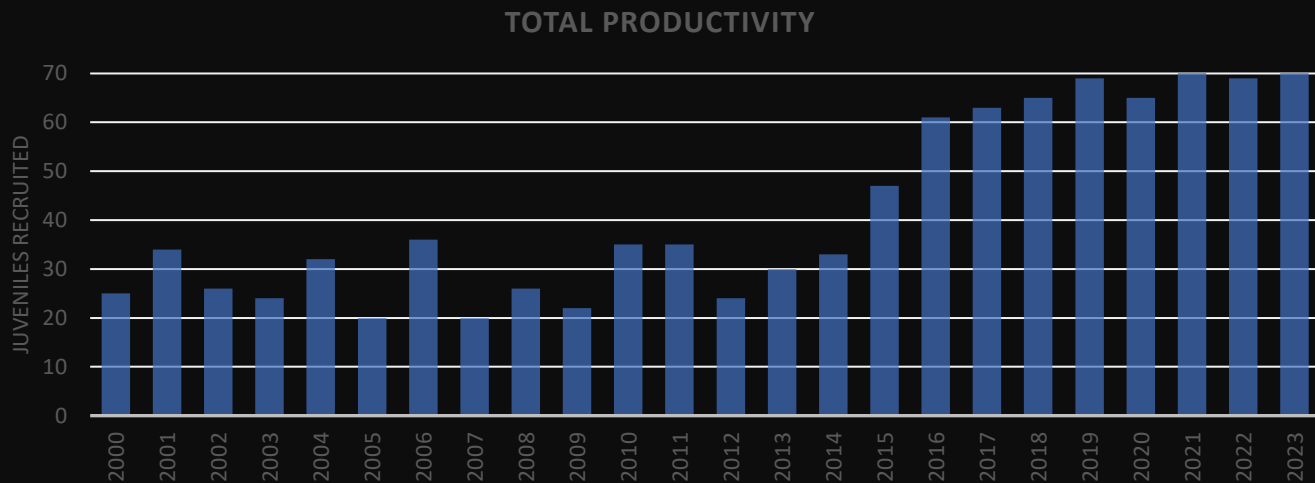
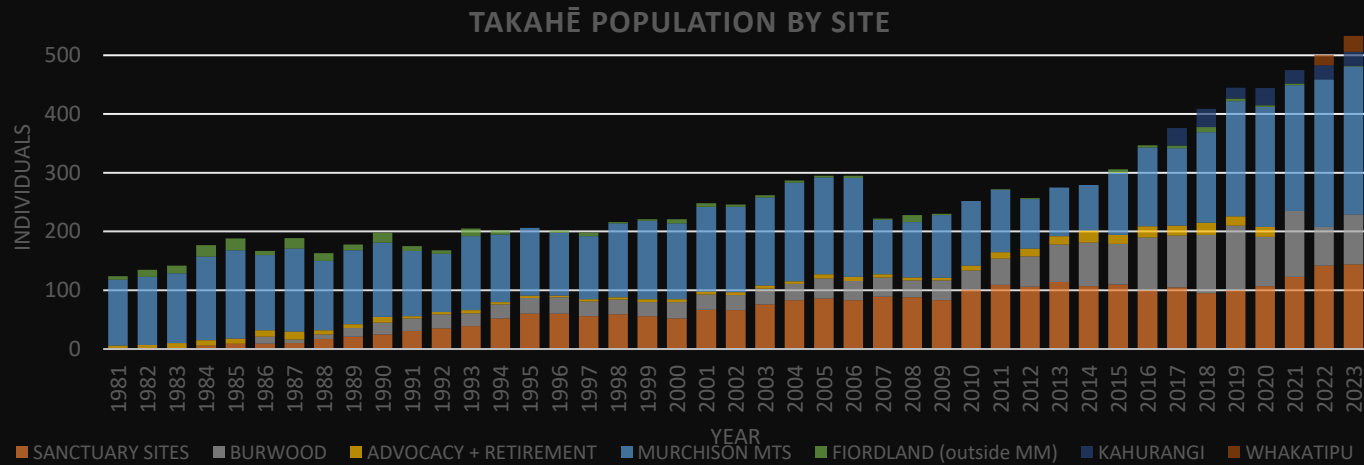


Key

- Public access available
- No public access

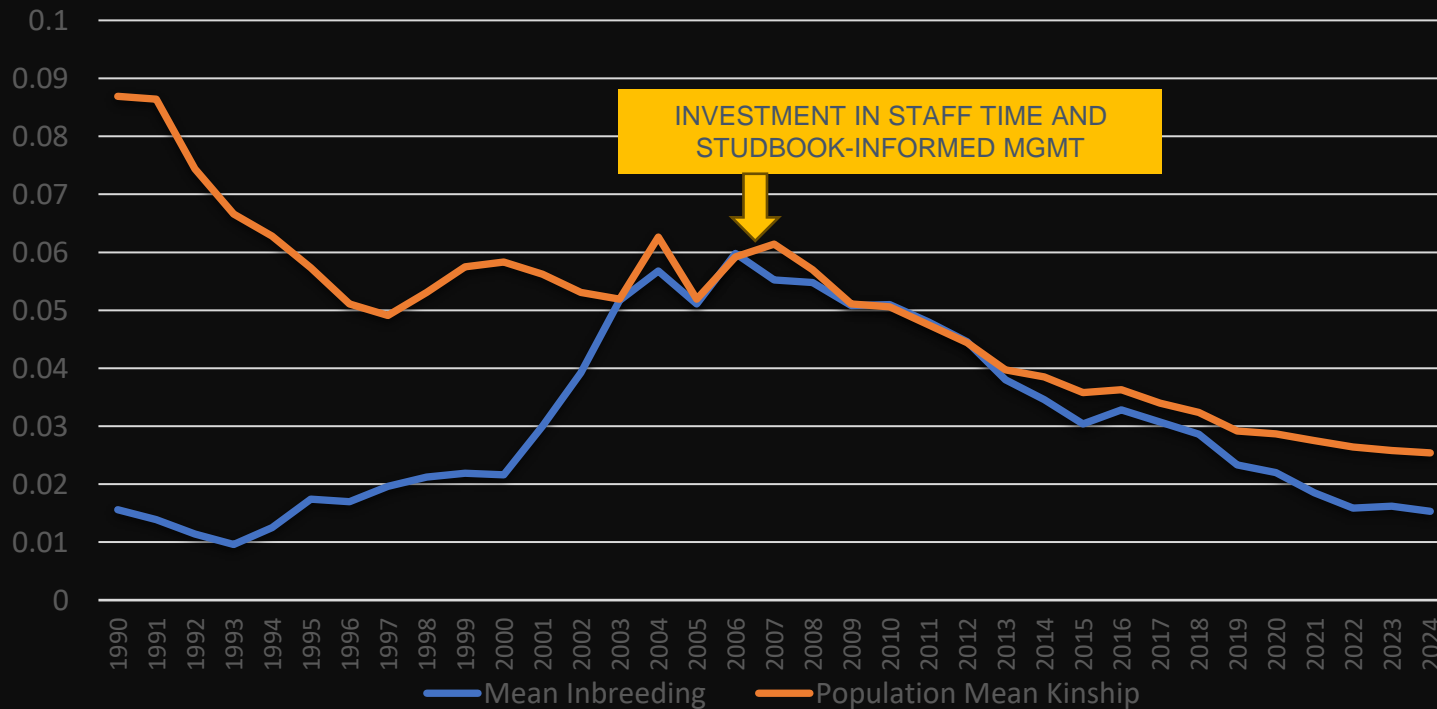
Note: there are two other privately owned island sanctuary sites.

Demographic Performance



Genetic Performance

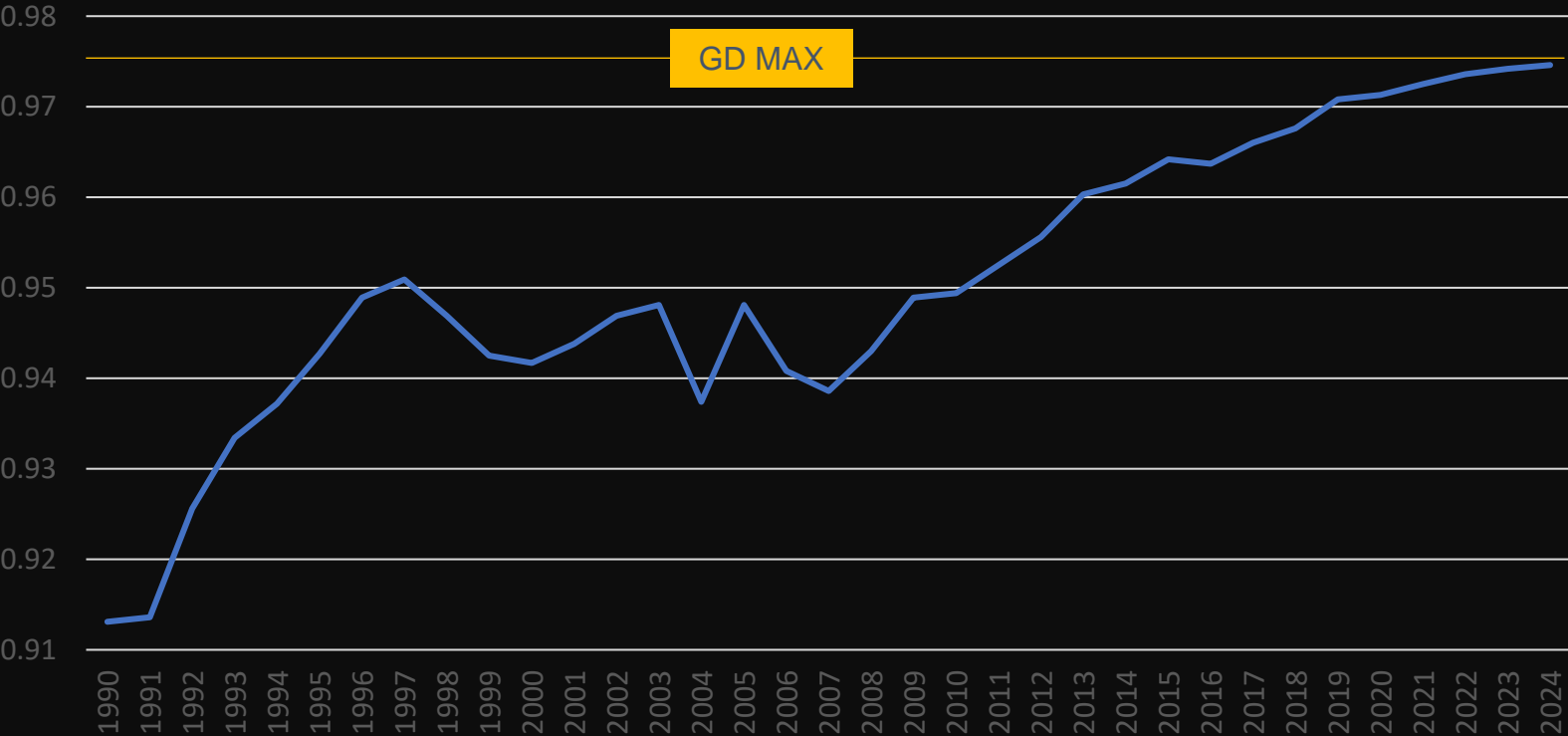
META-POP_n MEAN KINSHIP AND INBREEDING



- Reliance on ZIMs Studbook, PMx informed transfers and pair/nest management
- Five-yearly review of population and genetic health targets – undertaken by CPSG

Genetic Performance

META-POP_n – GENE DIVERSITY HELD



TAKAHĒ MOVEMENTS

~70 – 80 transfers per year



PRIORITIES:

- ✓ >40 to the wild (new and existing sites) – all via Burwood
- ✓ Genetic management (maintain 65 highest value pairings at Sanctuaries)
- ✓ Maximise site performance (carrying capacity and sex ratios)

TAKAHĒ SANCTUARY SITES

History and role

- > First sites established in early 1980's (Maud, Kapiti, Tiritiri Matangi, Islands)
- > After 2011 review and genetic + population modelling, saw opportunity to increase size of sanctuary population (current target 65 pair spaces across 17 sites).
- > Managed as a metapopulation, with all genetic diversity well represented.
- > Annual growth exceeding 20 takahē – contributing to the growth of wild populations.
- > Critical role in takahē advocacy



CHALLENGES

Building a sustainable future for takahē

- > Sanctuary meta-population requires ongoing intensive management (e.g tussock training)
- > Sanctuary Sites reforestation closing out takahē habitat.
- > Financial challenges faced by Sanctuary Sites
- > Need to solve the bottleneck at Burwood
- > Pest control compatibility is our biggest barrier
- > Critical that we continue to:
 - > test sites seeking a more suitable combination of ecological dynamics
 - > Work with others to develop effective pest control tools
- > Impact of climate change?
- > Impact of disease?





Thank you!



Te Rūnanga o NGĀI TAHU



Department of
Conservation
Te Papa Atawhai



Fulton Hogan

NZ
NF

New Zealand
Nature
Fund



Takahē
RECOVERY