

# Hilltops to sea

Striving to protect threatened species and ecosystems in coastal Otago - learnings and challenges from Forest & Bird's Tautuku Restoration and Bring Back the Seabirds projects.



C Knox



F Cunningham

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F&B, Otago Projects Manager

4 September 2025



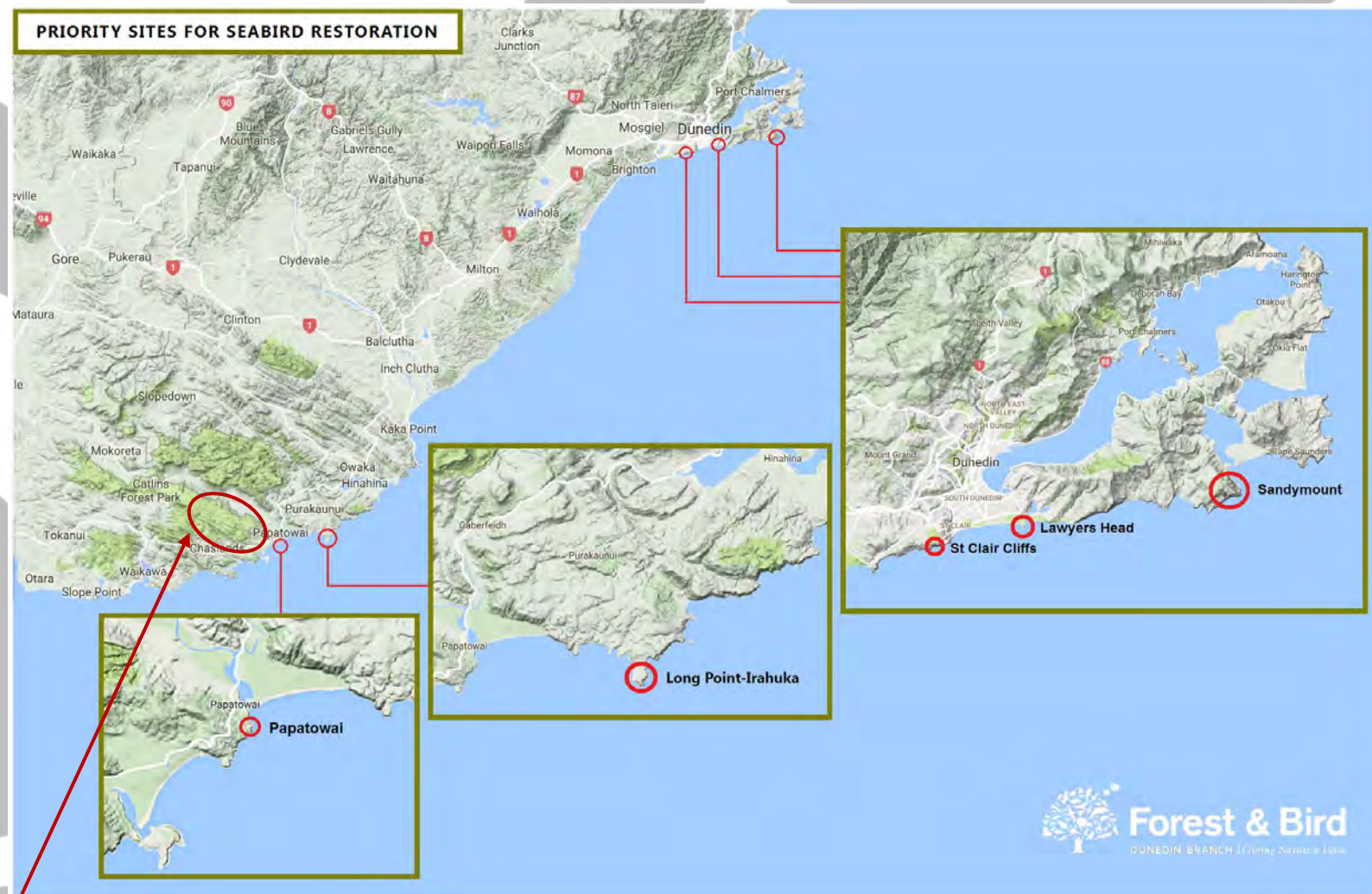


# Project Aims

- Our projects, remnant seabird colony and forest ecosystem restoration, are both outcome focussed
- Make sure we are protecting what we are aiming to protect
- This involves understanding what the priorities in our project areas are, the threats they face, and whether our actions are effective – adaptive management
- Conservation funding is limited, need to maximise our outcomes
- Aim for our work to contribute to large scale studies and collaborative wider conservation



# Seabirds – where we work



Tautuku Restoration project area





# Tautuku- where we work





# Catlins



Images: G Rees, C McKenzie, C Miskelly, C ODonnell, P Melgren DOC C Mckenzie, P Tait, S Bernert NZBirds online

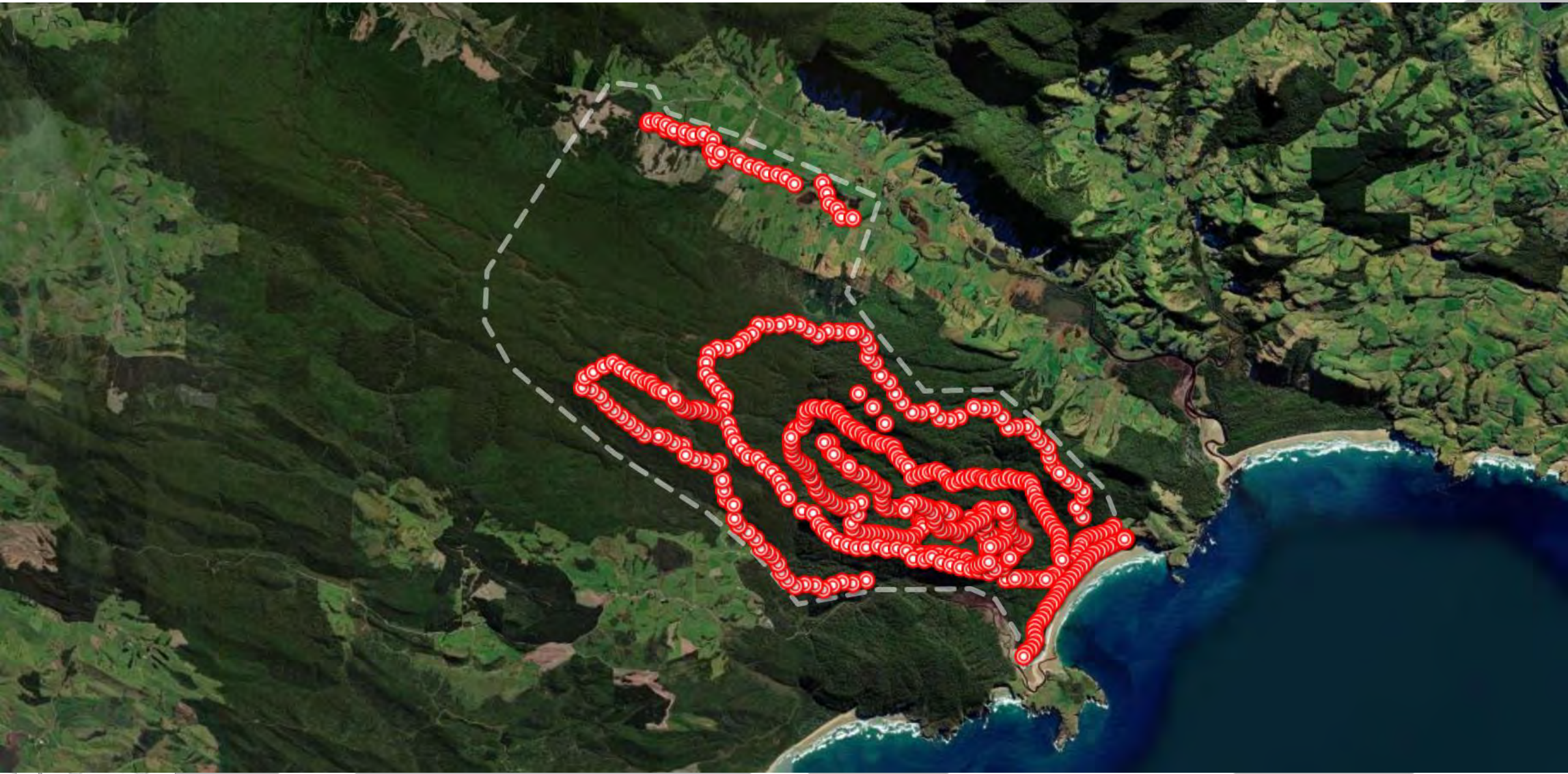




# Tautuku Restoration Project

- Last remaining river catchments on SE coast with native vegetation
- Mixed podocarp/kamahi/rātā/broadleaf forest
- Tidal and freshwater wetlands, clearings
- What to protect and how?
- Predator and browser control across >5,000ha





F&B trap network, Tautuku, Fleming and Tahakopa. Source TrapNZ



# Native species monitoring – freshwater fish

- Search the area for what is already there, inform management decisions
- Fresh water monitoring of Fleming and Tautuku rivers – increased knowledge of species presence. Now complemented with eDNA surveys.





# Native species monitoring

- *Galaxias gollumiodes* discovery





# Native species monitoring – Tautuku gecko

- Presence of the threatened gecko *Mokopirirakau* “southern forest”
- Located deep in the forest centrally in project area – monitoring underway, current trends unknown. Establishment of forest edge site





# Mokopirirakau, Tautuku gecko



Images: C Knox



# Nest success monitoring



- Studies on key bird species and their nest success to assess effectiveness and better focus introduced predator control efforts
  - **Mātātā/ SI fernbird**
  - **Titipounamu/ SI rifleman**
  - kakariki spp.
  - **karearea**
  - **kororā/little blue penguin**
- Nest predation still occurs
- Fledging survival appears low for some species













UOVision

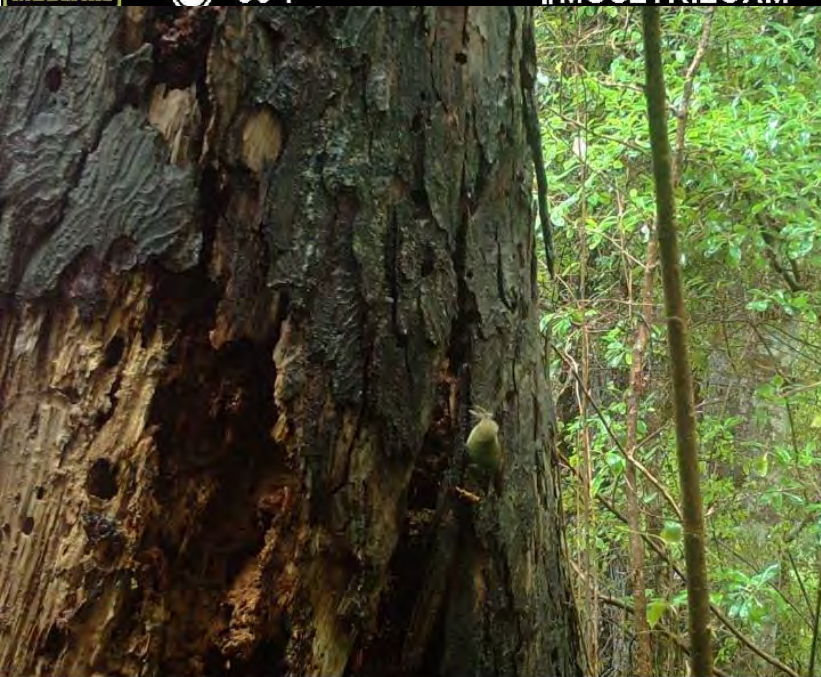
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MOULTRIE 50°F #MOULTRIECAM



MOULTRIE 48°F #MOULTRIECAM



Images: F Cunninghame, M Otis, J Jimenez





MOULTRIE 14°C 29.71inHg SM2----- 08 JAN 2020 03:32 pm



MOULTRIE 18°C 29.72inHg SM2----- 23 JAN 2020 05:02 pm



MOULTRIE 16°C 29.63inHg SM2----- 27 JAN 2020 11:04 am







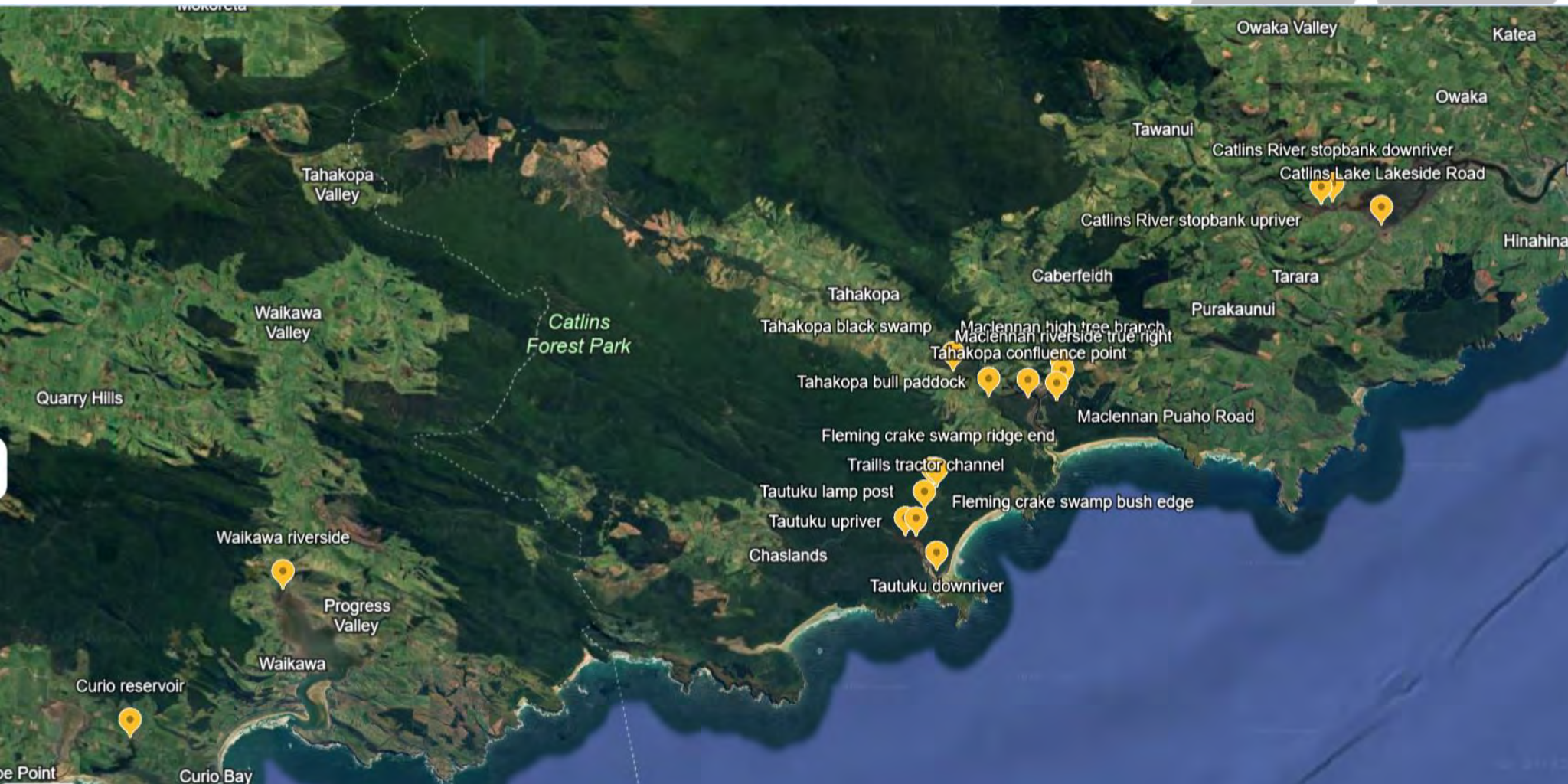
# Kororā / little blue penguin

- Colony on edge of project area at Isas Creek, Tautuku Beach
- 2019: Initiated low impact monitoring of active nest burrows, predator control
- 2020: Installed nest boxes – still much to learn , Feb 2022 first record double clutching
- 2024/2025: Extend to F&B's Te Rere reserve, collaborations





# Matuku hūrepo / Australasian bittern



- Partnership, ORC + BirdsNZ Otago, collaboration F&B Tautuku
- Regional focus, together we can achieve greater outcome



J Bonny



F Sutherland





J Young



A Schiffer



P Simpson



F Cunningham

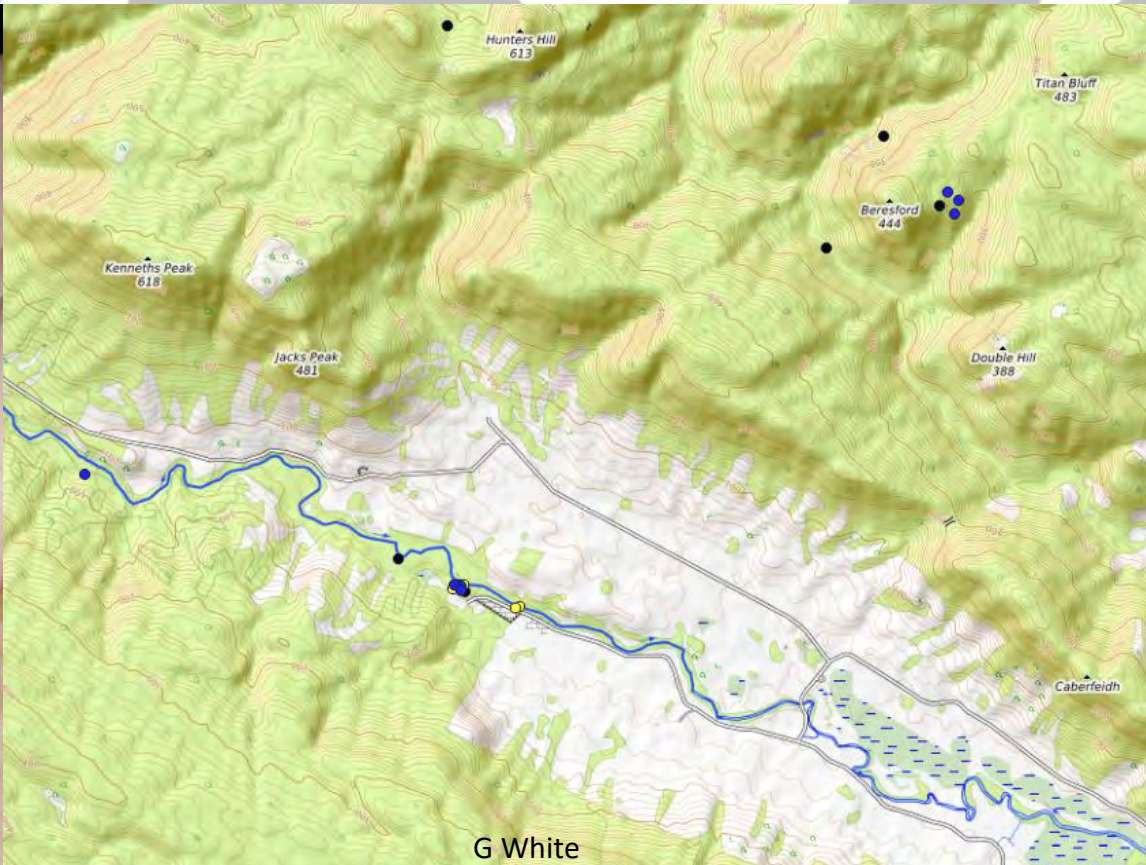


# Pekapeka-tou-roa / long-tailed bat

- Determined that colonies persist in our project area
- Five seasons of monitoring, colony located in small scenic reserve – initiated protection, contributed to development planning, on going monitoring



More



G White



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F&B trap network, pekapeka-tou-roa roost sites, Tahakopa Valley. Source *TrapNZ*



# Botanical surveys

- New finds that further highlight the importance, and fragility, of the area
- *Orisia modesta*, *Olearia lineata*, *Tetrachondra hamiltonii*, shrublands, frost flat ecosystems





# Browser control

- The goals of this project cannot be achieved without effective large scale introduced deer and pig control – integral to our project
- Extensive damage from deer and pigs evident throughout the area
- Expand localised control, increase across catchments. Work together, landowners, Catchment Action planning



G White



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02/07/2022 07:23PM



R Johnstone



# Browser control



D Baigent-Mercer

5m x 5m Deer exclusion plot, F&B Lenz Reserve, Tautuku



# Challenges

- Extensive range of introduced mammals present throughout all habitats
- Where to prioritise action
- Need for thorough outcome monitoring – different species have different needs





# Manu Moana

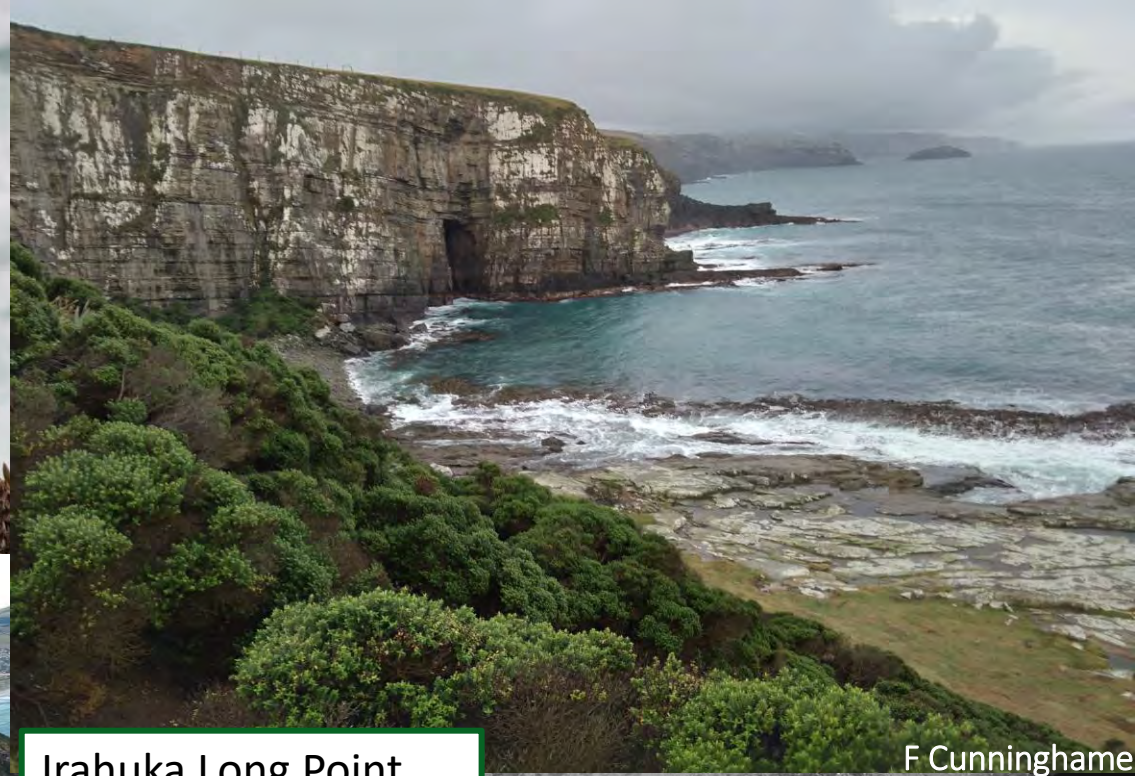


- Globally seabirds continue to be the most threatened group of birds
- At sea – bycatch and prey shortage from fisheries, plastic ingestion, food shifts due to climate change
- On land where they roost and breed – introduced species predation, habitat loss
- F&B's Otago seabirds project is focussed on protecting and enhancing local remnant seabird colonies
- F&B Society works hard towards mitigating the wider threats faced by seabirds, e.g. ACAP Meeting of the Parties Ōtepoti May 2025



# Bring Back the Seabirds, field sites

Introduced predator control / exclusion, bird nest success monitoring







# Sandfly Bay Hākoakoa, Tītī

- Significant remnant mainland colony
- > 300 burrows
- Aim to reduce introduced species predation, increase fledging success
- Best years > 100 tītī fledge per season







# Predator control, monitoring

- Mustelids, feral cats, rodents, possums\*
- Threaten: adults, their eggs, Tītī chicks
- Long period of vulnerability - > 5 months from egg laying to fledging
- Trail camera monitoring predators and birds







D Wilson



D Wilson



A Koncke



F Cunninghame



# Nest success

- No successful fledging in early seasons, recorded predation events
- Highlights vulnerability of Tītī and challenges with ground trapping
- Significantly increased fledging since intensifying trap network





# Intensify introduced predator control

- Mustelid dog surveys 2024/2025, trap trigger alert hardware
- Better target trapping effort





# Intensify introduced predator control

- live capture trapping initiated in 2019/20 season
- Six seasons with successful fledging, although 2024 documented late season ferret predation





# Long term monitoring

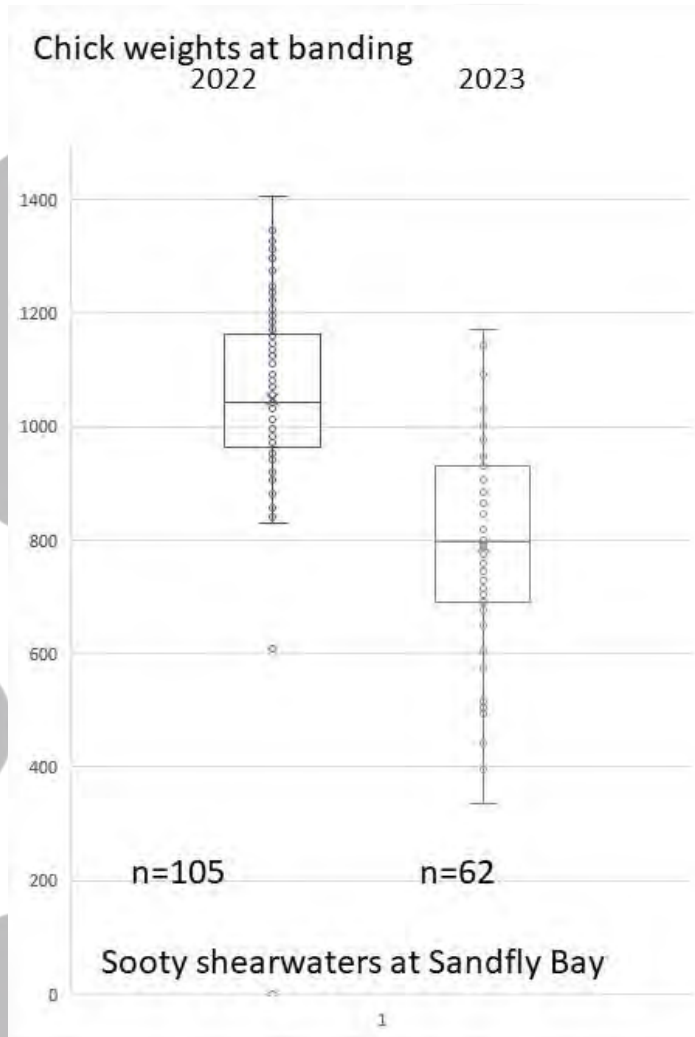
- > 250 pre fledge chicks banded since 2019 (72 Apr 2025)
- Average 6 years to return to colonies to breed
- First left leg band bird returnees recorded 2024





# Challenges – at sea conditions

- 2022/23 C. half as many chicks as previous two seasons
- Lighter body mass, starvation pre-fledging



Source: Graeme Loh



MOULTRIE

57°F

#MOULTRIECAM

17 APR 2023 12:49 pm



# Bring Back the Seabirds – upcoming mahi



F Cunninghame

- Continue and expand long term monitoring of seabirds at all sites
- Further adapt trap networks and obtain more data on nest success
- Share findings to assist wider landscape scale initiatives (Predator Free Dunedin, CAP)
- Increase awareness of the importance of remnant seabird colonies – burrowed seabird colonies as Critically Endangered ecosystems
- Highlight ongoing threats faced by seabirds





# Future challenges

- Ensure that our conservation efforts are successful at protecting the native species we aim to look after
- Ensure that what we do is financially and logistically feasible
- Maintain the project so it is sustainable into the future
- Contribute meaningfully to larger scale initiatives
- Positive progress: Ongoing and strengthening collaborations 😊



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Dunedin City Council

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