

# Coastal Restoration Trust of New Zealand, Conference, March 2024

## PROJECT UPDATES & PROPOSALS

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### Ongoing projects

1. **Restoration of a native forest coastal sequence** – Tuhaitara Coastal Park, North Canterbury
2. **Videos** – form and function of coasts, impacts of climate change...
3. **CRT coastal reference database** – online search engine for information on NZ coasts
4. **TTC seed island project** – demonstrating concept of seed islands on coastal sites
5. **Coastal monitoring** – promoting CRT tools for assessing dune vegetation and restoration

### Proposals

1. **'How-to' videos** – practical methods for restoration and management of our coasts
2. **Community workshops** – regional-based practical advice and demonstrations on coastal restoration
3. **Blue carbon/estuaries** – scoping Coastcare options for restoring estuaries and role of carbon sequestration
4. **Other project and funding opportunities** – request for input into priorities for CRT projects, funding options...

# Coastal Restoration Trust of New Zealand

## Project funding and support partners

### These projects are funded by:

1. Department of Conservation's Community Fund
2. Research partners of the Coastal Restoration Trust
3. Trees That Count/Project Crimson Trust project funding
4. Tāne's Tree Trust research fund

### Project partners provide support and co-funding

1. Department of Conservation, Northland Regional Council, Auckland Council, Waikato Regional Council, Bay of Plenty Regional Council, Greater Wellington Regional Council, Wellington City Council, Canterbury Regional Council, Christchurch City Council, and Timaru District Council, Te Kohaka o Tuhaitara Trust, Nelson City Council...
2. Coast care groups, coastal landowners and managers nationwide

**The Coastal Restoration Trust is grateful for ongoing support**

# Restoration of a native forest coastal sequence, Tuhaitara Coastal Park, North Canterbury

## Objective

- Set up a demonstration site of a restored native coastal forest sequence typical of north Canterbury

## Method

- Establish 50m wide transect within logged pine area as a coastal sequence linking foredunes, lagoons, wetlands, inland coastal forest

## Progress

- Delays due to COVID, flooding and major fire November 2022 – 160 ha of pine with native plantings and trials burnt
- Second year completed with boost in replanting burnt areas of coastal sequence with natives
- Planting coastal podocarp forest groves underway on inland dunes

## Funded by

- DOC Community Fund with CRT research partners and Te Kohaka o Tuhaitara Trust and Trees That Count



# Videos – building resilient natural coasts in the face of climate change

## Outputs

- 14 videos are completed and available on the CRT website
- Produced by Simon Hoyle and Janet Andrews of Southlight Studios
- Focus is on working with nature and include:
  - form and function of our coasts
  - impacts of human use and climate change
  - adaptive management, managed retreat
  - community restoration...
- Videos part of wider CRT comms plan and promotion

## Funded by

- DOC Community Fund, CRT research partners
- Now seeking funding for next 10 'how to' videos



<https://www.coastalrestorationtrust.org.nz/resources/crt-resources/our-coast-video-series/>

# CRT coastal reference database

## Available on the CRT website

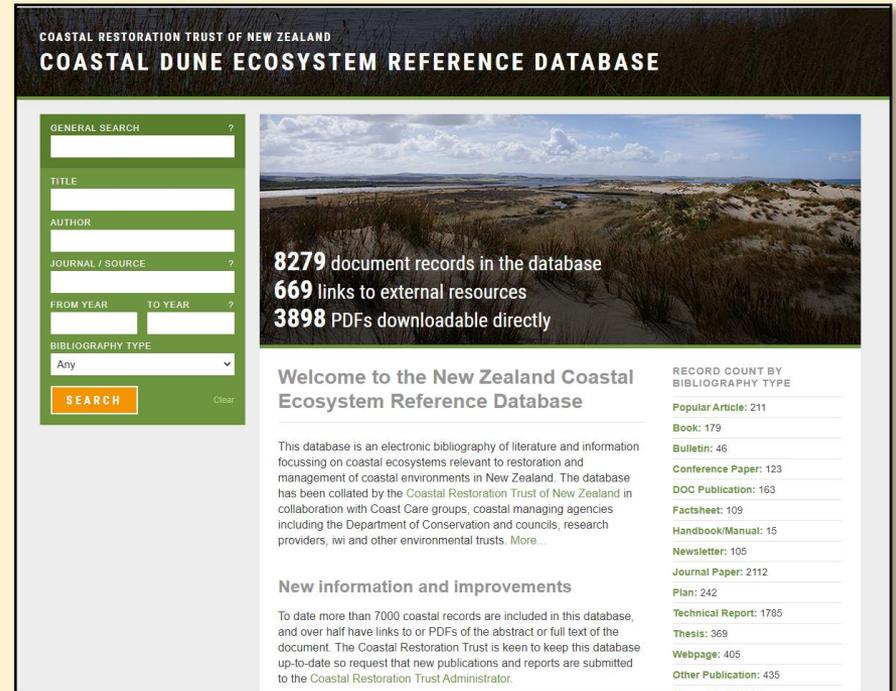
- Online bibliography of literature and information on coastal ecosystem restoration and management of coastal environments in New Zealand
- Collated by CRT in collaboration with Coast Care groups, DOC, councils, research providers, iwi...

## Online resources

- Over 8000 documents – check it out and use it...  
<https://www.coastalrestorationtrust.org.nz/resources/coastal-reference-database/>
- Most with links to PDFs and external sources

## Send new references

- Managed by Trustee Graeme La Cock
- Send in further references



COASTAL RESTORATION TRUST OF NEW ZEALAND  
**COASTAL DUNE ECOSYSTEM REFERENCE DATABASE**

GENERAL SEARCH ?  
TITLE  
AUTHOR  
JOURNAL / SOURCE ?  
FROM YEAR TO YEAR ?  
BIBLIOGRAPHY TYPE  
Any

**SEARCH** Clear

**8279** document records in the database  
**669** links to external resources  
**3898** PDFs downloadable directly

**Welcome to the New Zealand Coastal Ecosystem Reference Database**

This database is an electronic bibliography of literature and information focussing on coastal ecosystems relevant to restoration and management of coastal environments in New Zealand. The database has been collated by the Coastal Restoration Trust of New Zealand in collaboration with Coast Care groups, coastal managing agencies including the Department of Conservation and councils, research providers, iwi and other environmental trusts. More...

**New information and improvements**

To date more than 7000 coastal records are included in this database, and over half have links to or PDFs of the abstract or full text of the document. The Coastal Restoration Trust is keen to keep this database up-to-date so request that new publications and reports are submitted to the Coastal Restoration Trust Administrator.

**RECORD COUNT BY BIBLIOGRAPHY TYPE**

Popular Article:	211
Book:	179
Bulletin:	46
Conference Paper:	123
DOC Publication:	163
Factsheet:	109
Handbook/Manual:	15
Newsletter:	105
Journal Paper:	2112
Plan:	242
Technical Report:	1785
Thesis:	369
Webpage:	405
Other Publication:	435

# Seed island concept for coastal sites

## Objective

- To accelerate landscape scale restoration of native forest on coastal sites by demonstrating concept of 'seed islands' – helping nature

## Rationale

- Cost for blanket planting natives is \$20,000+ per hectare, more on difficult dune sites
- Practical option – plant small groves of natives on best micro-sites across a landscape as long-term seed sources, e.g., 1 or 2 per ha depending on scale
- Seed islands can be any size, shape and comprise range of shrub and tree species
- Scattered seed islands become 'stepping stones' for both wind and bird dispersed seed to boost natural regeneration at scale

## Progress to date

- Two coastal sites established to date:
  - Kawhia – mixed species groups planted on backdunes (**see during field trip Friday**)
  - Tuhaitara Coastal Park – coastal podocarp groves – totara , matai, kahikatea

## Collaboration and funding

- Tainui-Kawhia Inc, Kawhia Coastcare, Waikato Regional Council
- Te Kohaka o Tuhaitara Trust, local community, Canterbury Regional Council
- Trees That Count and Tane's Tree Trust
- Coastal Restoration Trust research partners



Seed island planting sites around a backdune pond, Kawhia

# CRT coastal monitoring tools

## Online tool

- Check out easy-to-use online methods for quantifying dune vegetation cover
- Repeat assessments assesses restoration success of Coastcare and guides priorities, e.g., more pest animal control required

## Involves

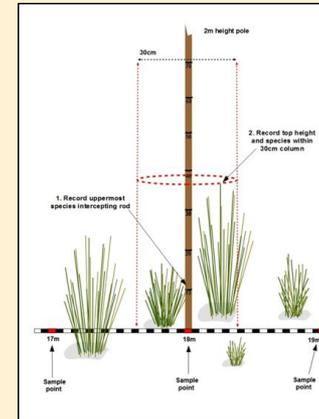
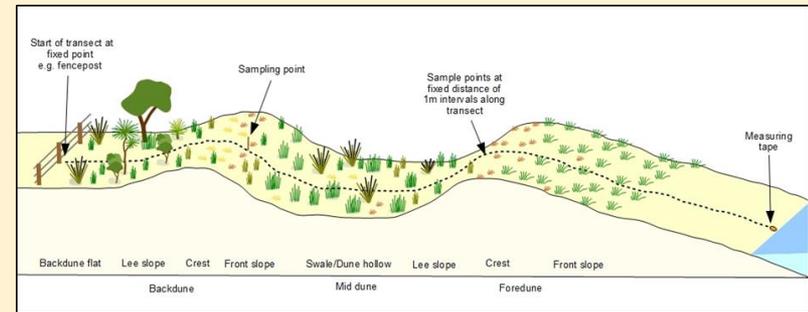
- Setting up transects across the zones from foredune to landward
- Uses a point-height sample plot method at fixed intervals along transect (**will demonstrated during field trip on Friday**)
- Records dominant plant species in relation to contour of dune and proximity of coastline
- Automated data analysis and results as graphs and tables

## Online tool link

- <https://monitoring.coastalrestorationtrust.org.nz/>

## Funded and supported by

- CRT research partners, regional councils...



*A rapid point sampling method using a transect set up across the dune perpendicular to the coast*

*Point sampling along dune transect, Cooks Beach, Coromandel.*



# Project proposals and ideas

## Proposals

- **'How-to' videos** – practical methods for restoration and management of our coasts
  - 10 videos planned with Southlight studios on species selection, planting, weed and pest animal control, etc
  - Other ideas for further funding – e.g., philanthropic entities
- **Community workshops** – regional-based practical advice and demonstrations on coastal restoration
  - Need for on-the-ground demonstration of best-practice planting and management
  - Practical field-based workshops for iwi, Coastcare, schools, councils in key regions, e.g., Tairāwhiti
  - Funding support required
- **Blue carbon and restoration of estuaries** – exploring options including:
  - Quantifying biodiversity benefits and blue carbon in coastal restoration particularly estuaries
  - Includes linking with wider catchment restoration initiatives to reduce sedimentation
  - Aim to provide local authorities tools to quantify biodiversity gains, carbon sequestration and climate change mitigation in coastal restoration expenditure
  - Potential collaboration including Dr Clint Cameron with expertise in blue carbon, mangroves, seagrass, etc

## We need to know your ideas for new CRT projects

- **Priority areas** – what are the priority areas on our coasts
- **Potential collaboration** – scope to work with other research providers, councils, Coastcare, iwi...
- **Funding opportunities** – new projects require funding