Rēkohu / Wharekauri
Chatham Islands

Festival *of* Science

11 - 16 August 2026

SPONSORS AND SUPPORTERS

For over 150 years the Chatham Islands have been visited by international scientists to study the geology of Gondwana, observe weather patterns, map the solar system, monitor seismic movement, and much more. The Islands are like the canary in a cage for the impacts of climate, biodiversity and ecological change.

Located 800 kms east of New Zealand the Islands are thought of as the eastern-most outpost within the largely submerged continent of Zealandia. With exposed submarine volcanoes and fossil-rich marine sediments, the Islands offer a rare uplift window into Earth's ancient past.

Home to nearly 10% of NZ's endangered species, conservation holds an important place both nationally and internationally. The rescue of the black robin from near extinction between 1976-89 and the rediscovery of the Chatham Islands tāiko in 1978 has made the Island famous amongst birdwatchers and environmentalists, with several species on international birding lists. That work continues through the efforts of the Department of Conservation, local groups and individuals – yet their very efforts are under threat. This rich biodiversity together with vulnerable ecosystems and a passionate community saw the Islands join the international Island-Ocean Connection Challenge.

The Island is regarded by resident beekeepers as the Noah's Ark of the apiary industry as it remains disease free. Research and work is underway to establish the island as a bee sanctuary.

The Festival of Science draws on this extraordinary legacy, offering a week-long programme of science-inspired events that bring together local knowledge, the latest research, and global perspectives. This year's theme spans the land and sea exploring their dynamic interconnections with life.

@ChathamIslands

chathamislands.co.nz

Enquiries and bookings to manager@chathamislands.co.nz

Travel and Accommodation Package Tours Available

Make the most of your visit and book the Festival package with Chatham Island Tours

Chatham Islands

Festival of Science

11-16 AUGUST 2026

Programme subject to change - please follow the Festival of Science facebook page for updates

All Festival events are FREE

Programme at a glance

Monday 10th August	
Chatham Island Council Chambers (CICC) - 5:30pm	*Pre-Festival Evening Presentations* • *To be confirmed*
Tuesday 11th August – Landscape Restoration	
CICC - 5:15pm	• ***Mayor Greg Horler*** – Official Welcome • ***Hamish Chisholm*** – Restoring Nature's Gift Project Update • ***Dr. Peter de Lange*** – An update on the Chatham Island Flora? – A revised terrestrial ecosystem map for the Chatham Islands • ***Milly Farquhar*** – Blackwater Streams of Rēkohu • ***Dr. Willem de Lange*** – Restoring the sandy coasts of Rēkohu/Wharekauri
Wednesday 12th August – Protecting Endangered Seabirds and Marine Wildlife	
CICC - 4:30pm	• ***Johannes Chambon*** – The hidden lives of ocean wildlife • ***Jenna Hoverd*** – Building New Colonies: Seabird Translocation • ***Rachel Klein*** – The Art of Nesting • ***Campbell James*** – The effect of bird density on lichen diversity
Thursday 13th August – History Uncovered	
CICC - 4:30pm	• ***Dr. Jeffrey Robinson*** – An amazing 55-million-year-old fossil fish from Pitt Island • ***Hamish Campbell*** – The volcanic history of the Chatham Islands – Lost and Found: Bob Weston's Bizarre Beast • ***Dr. Katherine Holt*** – Chatham Island Lakes: History and Health • ***Research videos*** – Reflections on Ecology Field Course projects
Friday 14th August – Beers & Ideas, Growing the Primary Sector – TBC	
The Den - 4:30pm	• ***Lisa Futschek*** – Chief Executive, Seafood New Zealand • ***Pita Thomas*** – Seeding the Future: Wild oyster farming • ***Jason Marshall*** – Pollination Power and Primary Production • ***Open forum***
Saturday 15th August – Building a Resilient Apiculture Industry on the Chatham Islands	
CICC - 2pm	• ***Jason Marshall*** – Small Island Big Future - Resilience, Protection, Production • ***Toni Croon*** – Going commercial / My findings for the season
Sunday 16th August	
	• ***Community Activities to be confirmed***

Additional Activities Throughout the Week

Oyster farming Field Trip – Details to be confirmed

Beers & Ideas - Details to be confirmed

Youth Science Fair - Details to be confirmed

Rātā Foundation

Air Chathams 44°S

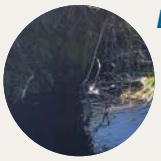
Hotel Chathams

Presenters

Hamish Chisholm – Hamish is the Project Coordinator for the Landscape Restoration Trust. He's been involved with this work on island for five years, and involved in Predator Free and conservation even longer. He'll be joined by a few of the Trustees.

Dr. Peter de Lange – Peter is a Professor of Biosystematics & Conservation Sciences, based in the School of Environmental & Animal Sciences, Unitec, Auckland. A Fellow of the Linnean Society of London, Loder Cup and Allan Mere Recipient, Peter has worked on the Chatham Islands Flora since his first visit to the islands in 1996. Prior to his academic career Peter was a Principal Scientist with the Department of Conservation with whom he worked for 27 years. Currently Peter is Chair of the Chatham Islands Conservation Board and also provides advice on botanical / ecological matters to various island restoration projects, Hokotehi Trust Board, Chatham Islands Museum and Chatham Islands Landscape Restoration Trust.

Milly Farquhar – Milly is a freshwater ecologist who has spent the past three and a half years working on the Chatham Islands. She has supported both the MPI freshwater project and the Chatham Islands Restoration Trust, focusing on improving our understanding of freshwater ecosystems. Her work centres on how land use influences stream health, particularly in peat-influenced blackwater systems, using field-based monitoring and applied ecological research to support restoration and management.

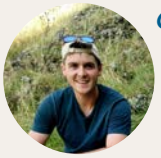


Dr. Willem de Lange – Now retired, for 40 years he taught most subjects within Earth Sciences at the University of Waikato, while undertaking research into the risks and mitigation of natural hazards, and coastal processes. His research including developing and testing approaches to coastal restoration including beach replenishment and dune restoration. During his last decade at the University, he was involved in establishing a multi-disciplinary field techniques undergraduate course that was primarily taught during a week-long trip to Rēkohu. In his retirement, he is involved in expanding a network of traps to form a virtual predator fence across the Tawharanui Peninsula to enhance the halo of native birds expanding from the physically fenced area of the Tawharanui Regional Park.

Johannes Chambon – Jo is a conservationist and seabird biologist with 10 years of experience working in insular ecosystems monitoring wildlife, controlling invasive species, and restoring plant communities. Originally from France, Jo worked on a vast number of islands across New Zealand, Saudi Arabia, Mauritius, Greece, Mayotte, French Polynesia, and Australia. While enthusiastic about all avian and insular ecology, it is with seabirds that his true passion lies and over the years Jo worked with terns, gulls, tropicbirds, frigatebirds, boobies, petrels, shearwaters, prions, and albatrosses.

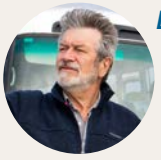
Jenna Hoverd – Jenna Hoverd is a proud local of the Chatham Islands with a strong background in conservation and community leadership. She spent eight years with the Department of Conservation, working across a range of biodiversity and field operations unique to the Chatham environment. For the past four years, Jenna has been a trustee of the Chatham Islands Taiko Trust, and more recently has stepped into a key role helping to drive the Trust's operational work.

Rachel Klein **–** Rachel is an Auckland-based ecologist, environmental and animal science lecturer, and lifelong animal enthusiast. Her work and interests sit somewhere between science, storytelling, and a deep curiosity about the natural world. She is especially passionate about native biodiversity, animal behaviour, and helping people connect with the environments around them. Outside of research and teaching, Rachel is usually surrounded by animals, including horses, dogs, cats, chickens, and anything else that wanders into her care.



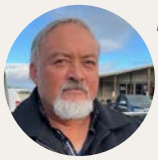
Campbell James **–** Campbell James is a Field Technician at Unitec, where he completed his Bachelor of Applied Science: Biodiversity Management. Campbell is an avid botanist and lichenologist, completing his third-year dissertation on the lichen communities of Chatham Island limestone. This work shines light on understudied yet significant communities of a rare and endangered habitat, contributing new knowledge to lichen ecology in Aotearoa.

Dr. Jeffrey Robinson **–** Jeffrey is a Research Fellow in the Geology Department at the University of Otago in Dunedin. He is currently creating a digital database of the globally important fossil collections in the Geology Museum. His research interest lies mostly with marine invertebrates, particularly brachiopods, but he is also involved in publications on vertebrate fossils, principally as a photographer. Outside work hours he is a keen amateur musician and gardener.



Dr. Hamish Campbell **–** Hamish is an Emeritus Scientist with Earth Sciences New Zealand (ESNZ, ex-GNS Science). Although retired, he is still actively involved in geological research, especially anything to do with the geology of the Chatham Islands. He is somewhat itinerant but based in Wellington, and is very involved in the tourist industry, not least leading tours on a regular basis to the Chathams.

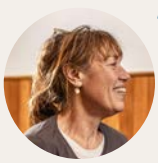
Dr. Katherine Holt **–** Kat is a palynologist (pollen analyst) and geologist with a strong interest in geology and palynology of the Chatham Islands. She currently operates her own business performing pollen analysis on honey and sediment samples for commercial and research applications, and holds an adjunct research position at Massey University in Palmerston North.



Pita Thomas **–** Pita Ned Thomas is the long time owner and founder of Waitangi Seafoods (2007), a locally owned and operated seafood processing and export business. Pita and his company have been central to guiding a strategic direction and on the ground operations in fisheries for more than two decades. His work is closely tied to the local fishing community, with Waitangi Seafoods known for processing blue cod, kina, paua and developing other species, adopting sustainability practices and looking to adding value to the fisheries resources to the benefit of the Island.

Jason Marshall **–** Jason's company, SJ Apiaries (SJA Bees), provides pollination services, high quality queen bees and nucleus colonies, and exports live bees internationally, including to Canada. He's grown the business from a small operation into multi region commercial scale, built on strong systems, hive health, and rigorous biosecurity. He is passionate about lifting industry standards and helping communities think long term about protecting their natural and economic assets.

When Jason talks about bees, he's not just talking about honey production. He's talking about food security, biosecurity, economic independence, and protecting opportunity for the next generation. On an island like the Chathams with a population of disease free bees those things matter even more.



Toni Croon **–** A lifelong Chatham Islands local and former horse trainer, Toni Croon has owned the iconic Hotel Chathams for over 35 years. In recent years, leasing out the hotel has allowed her to focus on one of her long-standing passions—beekeeping.

Programme

Programme details

Tuesday 11th August

Restoring Nature's Gift – Project Update

Hamish Chisholm – The Chatham Islands Landscape Restoration Trust

The Chatham Islands Landscape Restoration Trust is an inspiring group from the community working towards island-wide conservation and ecosystem restoration. They will share their predator-free and landscape restoration work—already bringing plant, animal, and birdlife back—alongside scientific research to create a restoration strategy.

An update on the Chatham Island Flora - what is there and what is an issue?

Dr. Peter de Lange

The most recent published checklist of the Chatham Islands' vascular flora (ferns, conifers, and flowering plants) dates to 2011 and is now outdated. Updated floristic inventories are crucial for guiding threatened species priorities, restoration efforts, and biosecurity planning.

Since 2011, targeted surveys have added numerous new records, including previously unrecorded indigenous species and range extensions. The number of naturalised plants has also grown, with species establishing from gardens, freight, and human traffic. While some major invasive weed groups are still absent, this should not prompt complacency—strong, coordinated biosecurity measures are urgently needed.

This presentation examines patterns in Chatham Island flora, highlighting new indigenous plant discoveries, including both new species and previously unrecorded range extensions.

A revised terrestrial ecosystem map for the Chatham Islands

Dr. Peter de Lange

The potential to restore terrestrial ecosystems on the Chatham Islands depends on making well-informed decisions. These decisions need to be based on understanding the ecosystems that currently exist, as well as identifying areas of marginal land that could be rehabilitated or restored to support these ecosystems.

In the past, efforts to map the islands' ecosystems have faced several challenges. These included the use of unsuitable classification systems, mapping at too broad a scale (which oversimplified the landscape), and limited access to many parts of the islands, which restricted fieldwork.

Today, high-quality satellite imagery makes it possible to map ecosystems much more accurately. This information still needs to be confirmed through on-the-ground checks, but overall it provides a far stronger foundation than before.

Over the past year, the Chatham Islands Landscape Restoration Trust has worked with a range of specialists to develop detailed maps and descriptions of the islands' ecosystems. These resources are designed to guide landowners and the wider community in restoring or rehabilitating ecosystems on their land.

This presentation reports on the progress toward completing these maps and descriptions. It also highlights practical examples of how ecosystem restoration and rehabilitation can benefit both the environment and the island community.

Blackwater Streams of Rēkohu: Structure, Function, and the Role of Land Use

Milly Farquhar

Streams on the Chatham Islands are naturally dark, peat influenced blackwater systems, shaped by surrounding organic soils and wetlands. These conditions create low light environments and support relatively simple biological communities, limiting algal growth. Recognising this distinctive structure and function is essential for understanding how land use influences stream health and ecosystem processes.

Continued overleaf...

Restoring the sandy coasts of Rēkohu/Wharekauri

Dr. Willem de Lange

The sandy coasts of Rēkohu had quite different vegetation to that found around the larger islands of New Zealand. The original vegetation consisted of a coastal forest extending down to close to the littoral zone, separated from the sea by a narrow fringe of rushes and other salt tolerant species, as can be found on the subantarctic island further south. Overall, there is not much sand available around the coastline as the "dunes" for much of the coast are a thin veneer of sand over rock, and sand can easily be lost by blowing inland, being transported into Te Whanga, or moved in deep water offshore.

Nonetheless, there appears to be a relatively easy method for restoring the sandy coasts using natural processes. The suggested approach proposed by Willem is to establish islands of coastal vegetation within blowouts in the current dunes, managing browsing by animals and predation of birds, and allowing the birds to spread seeds along the coast.

Wednesday 12th August

The hidden lives of ocean wildlife and how they may respond to a changing world as revealed by the latest technology

Johannes Chambon

Out in the open ocean live some of the world's rarest seabirds we almost never see. The Chatham petrel and the Chatham Island tāiko, breeding only on the Chatham Islands, spend most of their time far from land, making it hard to know how they are coping with climate change. To uncover their secrets, Johnannes fitted these birds with small GPS trackers, revealing where they go to feed while raising their chicks. Combining these tracks with decades of monitoring data reveals both species travel to deep ocean waters, often gathering around the productive subtropical front, which lies directly south of the Chatham Islands. Even though the subtropical front has shifted further from the Chatham Island in the past few decades, the birds are still doing surprisingly well. This presentation reveals the surprising information on the population growth, survival and breeding success and the impact of climate change.

Building New Colonies: Techniques and Lessons from Seabird Translocation

Jenna Hoverd (Chatham Island Taiko Trust)

Jenna describes this as a boots on the ground presentation – she will provide a very special step by step insight into planning off-shore island translocations of some of the world's rarest endangered seabirds.

The Art of Nesting

Rachel Klein

Bird nests are often easy to overlook, but they can hold clues not only about the birds that built them, but also about the environments they live in. This presentation explores the nest construction of three small passerines found on Rēkohu: silvereye/tauhou, Chatham Island fantail/pīwakawaka, and Chatham Island warbler. By looking closely at what birds build with, nests can offer a small but powerful window into how Rēkohu's passerines use their environment. This work provides baseline information on local nest construction and opens up new questions about bird behaviour, habitat use, and how nests may help us understand changing island ecosystems.

The effect of bird density on lichen diversity in Chatham Island limestone communities

Campbell James

On the wind-scoured limestone outcrops of the Chatham Islands seabirds gather, nest, and depart, their presence written not just in guano-stained rock, but in the lichen that carpet the stone.

Lichen species have varying tolerance levels to environmental factors, specifically excess nitrogen from bird guano, affecting the richness and presence of species in different habitats. This presentation reveals the finding of a study that examined the relationship between nesting bird density and lichen communities on Chatham Island limestone habitats in four locations: Shag Rock (high), Motuhinahina (medium to high), Blind Jim's (medium to low), and the private farmland (low to none). The study contributes significant information on limestone habitats - these lichens also able to be used as indicators of nesting bird density influenced by pest control.

Thursday 13th August

An amazing 55-million-year-old fossil fish from Pitt Island, and some intriguing Chatham Island invertebrates

Dr. Jeffrey Robinson

The newly named 1.2 m long fossil fish, Ikawaihere koehleri, was collected from a cliff on Pitt Island in 1999. A powerful predator that gulped down smaller fish, this mummified fish is the most complete and informative tarpon ever found in the Southern Hemisphere. Other fossil-rich Cenozoic limestones, greensands and volcanic ash beds in the Chatham Islands preserve an wonderful array of small sea creatures with interesting stories to tell.

The volcanic history of the Chatham Islands

Dr. Hamish Campbell

The Chathams are an oddity for us geologists because 1) they have a remarkable record of volcanic activity spanning the past 85 million years, more or less impacting the one small spot on the Earth's surface, and 2) because the nature of the volcanism has changed through time. The obvious questions are: why and how? New research on the geochemistry of lava flows preserved in the Chathams provides considerable insight into what is going on. Come check it out before the next eruption!

Lost and Found: Bob Weston's Bizarre Beast

Dr. Hamish Campbell

A single incomplete fossil whale tooth found by Bob Weston (champion of the Chatham Islands Museum), has caused an international stir. It is the first confirmed record of the extinct whale genus Llanocetus to be found in New Zealand. And, it was a baleen whale. Go figure! A primitive baleen whale with a gummy mouth but still sporting teeth. A true missing link. Go Bob!

Chatham Island Lakes: History and Health II

Dr. Katherine Holt (Massey University)

The freshwater lakes of Rēkohu/Wharekauri are an important natural and cultural resource. In 2021, eight of the Island's freshwater lakes, as well as Te Whanga Lagoon, were sampled as part of the Lakes380 Programme, the largest study ever undertaken on lakes in Aotearoa. Since then, the scientists behind the programme have been working hard to analyse the samples collected to understand the health of these lakes and their catchments in the past and present, to better understand how to protect them into the future. This presentation provides the next instalment of findings from the Lake380 team, including new insights into aquatic ecosystem health and vegetation history on Chatham Island.

Ikawaihere Artist: Dr Seabourne Rust, December 2025

Friday 14th August

Beers & Ideas (Proposed)

Lisa Futschek – Chief Executive, Seafood New Zealand

Details to come.

Seeding the Future: How Science can compliment the wild Oyster Populations at the Chatham Islands

Pita Thomas

Wild flat oysters at the Chatham Islands have huge untapped potential—but natural recruitment can be low and seasonally influenced, the fishery remains under utilised. This talk explores how science driven spat seeding, built on NIWA's ecological research, can supercharge oyster settlement and survival on the Islands' ideal habitats. By boosting biomass and supporting sustainable harvests, this project aims to revitalise a culturally and economically important fishery for future generations.

Pollination Power and Primary Production

Jason Marshall

Jason will outline key reasons why bees are essential for agriculture.

Saturday 15th August

Small Island Big Future - Resilience, Protection, Production

Jason Marshall

A practical, straight talk session on building a resilient, biosecure bee industry — drawn from the journey of growing a small North Shore hobby into a commercial beekeeping, pollination, and international export operation. The presentation covers real-world lessons on standards, systems, queen genetics, and biosecurity discipline, with a focus on what the Chatham Islands need to protect their rare disease free bee population and secure long term environmental and economic resilience.

Going commercial / My findings for the season

Toni Croon

Hear Toni's summary of the season of beekeeping on the Chatham Islands.

We would like to acknowledge Air Chathams and Rātā Foundation for their support

Rātā Foundation

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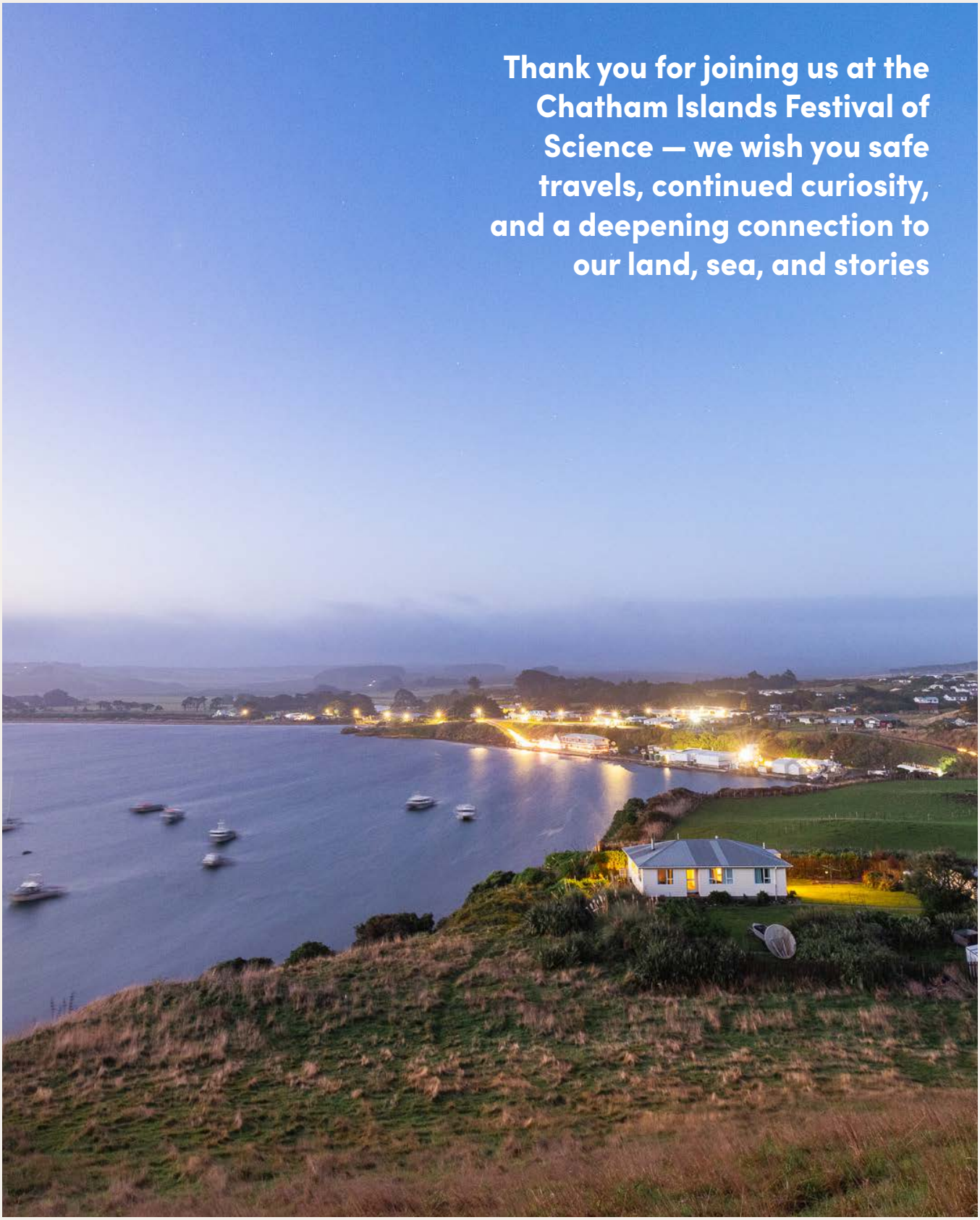

Notes