

# **A biosecurity strategy to help prevent the entry and establishment of pests onto the Chatham Islands**

## **A Discussion Document**

Prepared for the Chatham Islands Council  
by Environment Canterbury



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## **1. Context**

The Chatham Islands Pest Management Strategy (2001) has identified the Chathams Territory as being in...

*"...a unique situation, as its isolation has meant that many of the animal and plant pests common in New Zealand have either not entered the territory as a whole or are only present on some of the islands".*

Chatham and Pitt Islands are 'working' islands with established communities. Access is not regulated or restricted and day to day life involves the movement of goods, livestock and people as would be the case with any other rural area of New Zealand. A key difference however is that the Chatham Islands are free of many pests.

The physical connections between the Chathams and New Zealand provide risk pathways by which pests can arrive. Some of these pathways can be managed easier than others and some cannot be managed effectively at all. However the 'isolation' of The Chatham Islands will be a major contributing factor in developing some practical measures to keep out pests.

The purpose of developing a biosecurity strategy is to identify pest risk pathways and to provide some practical recommendations that will mitigate the risk. Integral to this will be a companion communications strategy aimed at raising biosecurity awareness amongst key groups.

## **2. Consultation**

A number of people were consulted in preparing this document and it would be useful to gather feed back from these individuals and other selected groups on the recommendations suggested.

- Hokotehi Moriori Trust
- Department of Conservation
- Biosecurity NZ
- Tourism operators
- Conservation Board
- Chatham Islands Enterprise Trust
- Ngati Mutunga O Wharekauri Trust
- Air Chathams
- Leslie Shipping
- Reef Shipping
- Federated Farmers
- MAF

### 3. Scope

Biosecurity is an all encompassing term that covers quarantine, contingency response and surveillance. It is inclusive of any unwanted organisms including pest plants, pest animals, invertebrates and organisms that cause disease.

This document takes account of the pests outlined in The Chatham Island Pest Management Strategy. It identifies potential risk pathways by which these pests might enter and outlines recommended biosecurity and quarantine measures.

This document does not address biosecurity risks associated with:

- the marine environment
- offshore islands
- natural movement of wildlife

Biosecurity issues related to the marine environment, including hull fouling and ballast water are crucially important to the Chathams and will be considered separately. A comprehensive approach to addressing marine biosecurity for the Chathams is required and Central Government will need to play a lead role.

Biosecurity provisions for offshore islands are currently catered for by the Department of Conservation. These provisions include quarantine and contingency response for pest incursions.

### 4. Existing biosecurity provisions

From a legislative perspective biosecurity and quarantine provisions for the Chatham Islands have no real point of difference to the rest of New Zealand. Acts and regulations including the Biosecurity Act (1993), its amendments and the Wild Animal Control Act (1997) have set the stage for The Chatham Island Pest Management Strategy (2001). The Chatham Island Council has prioritised unwanted pests in the strategy, set 'rules' and broadly outlined measures on how to prevent entry or effectively manage established pests.

A number of voluntary biosecurity strategies and codes of practice to mitigate biosecurity risk are also in place on The Chathams. The Department of Conservation has documented procedures to prevent the unintentional transport of pests to offshore islands and also instigated in-house quarantine measures for imported plants.

## 5. Managing risk pathways versus specific pests

A comprehensive list of pests have been identified in The Chatham Islands Pest Management Strategy (2001) and also by the Department of Conservation in the publication Unwanted Pests Biosecurity threats to the Chatham Islands (2002) which outlines organisms that could threaten the conservation estate. No doubt many other pest candidates could also be added to these lists. Although it may be appropriate to target specific pests in some instances this can be a very resource-hungry method of dealing with pest risk.

An alternative approach is to identify and manage specific risk pathways. By targeting these physical connections a wide range of pest organisms can be managed. Traditional quarantine systems usually operate at the border, however it is recognised that pre-border measures are the most desirable as they target pests before they arrive.

## 6. Identified pest risk pathways for The Chatham Islands

### 6.1 Shipping

There are two commercial vessels providing a freight and livestock service between New Zealand and the Chathams. The *Southern Tiare*, operated by Reef Shipping sails from the Port of Napier and the *Rangatira* operated by Leslie Shipping which sails from Timaru and Napier. The *Rangatira* also provides a service to Pitt Island, delivering freight and loading livestock for the return journey. Both services carry 'freight all kinds' and livestock.

#### 6.1.1 Biosecurity risk associated with cargo vessels

Generally the risk pathways created by the vessels themselves are limited and managed relatively simply (not including marine biosecurity risks). To be a threat any pest 'stowaways' would need to be quite mobile in order to leave the vessel when it berths. Potential pests might include rodents, birds and some invertebrates such as winged insects.

Included as part of the vessel would be risks posed by:

- Inadequately cleaned or treated stock containment areas which could provide breeding material for flies and other insects
- Animal feed or bedding used during the voyage

### **Recommendations**

Establish integrated pest management programmes on-board vessels used for commercial freight services.

## Key components

- Rodent control
- Crawling and flying insect control
- Bird control (if necessary)
- On board capability to deal with insect pest finds
- Adequately clean and/or disinfect pens or containers after carrying livestock
- Material such as meadow hay used for feed or bedding during livestock transport should not be unloaded or disposed of on the Chatham Islands
- Whole ship treatment/fumigation if significant or persistent pest problems are identified

### 6.1.2 Biosecurity risk associated with freight consolidation areas and containers

Both shipping companies consolidate freight at designated premises. Reef Shipping uses a freight company depot near to the Port of Napier. Leslie Shipping uses a shed and compound on the wharf at Timaru and also loads on the wharf at Napier. Both companies load freight into shipping containers that are designated specifically for the Chathams trade. The *Rangatira* has approximately 30% of cargo containerised with the remaining 70% break bulk. No figures were provided for *The Southern Tiare* but this vessel would have a higher percentage of its cargo containerised compared to the *Rangatira*.

For both shipping services it is common for items to arrive pre-packed in a box or crate. The contents are often unknown to the shipping company and not recorded on the cargo manifest, e.g personal effects.

Bulky items are transported as break-bulk cargo aboard the vessels and might include packs of timber, vehicles and machinery and essentially anything else that cannot be easily loaded into a container. This type of cargo can be delivered wharf-side on the day of sailing.

Re-use of containers owned by the shipping companies substantially reduces the risk of contaminants such as vegetation or soil being present on the outer surfaces providing the containers continue to be stored and loaded in the consolidation areas. The internal surfaces of the containers can provide harbourages for a range of pests that may have originated from the general environment or from loaded freight.

Reef shipping use modified shipping containers for livestock that could provide breeding material for flies if not cleaned adequately. Ideally feed and or bedding for the transit of animals should be of a type that will not carry a risk of weed seed contamination.

### **Recommendations**

Freight consolidation premises:

- Establish integrated pest management programmes

## Key components

- Rodent control
- Crawling and flying insect control
- Bird control (if necessary)
- On site capability to deal with insect pest finds
- Site or freight treatment if significant or persistent pest problems are identified
- Additional monitoring/surveillance programs for specific pests if required

## Containers:

- Pest control of container interior and exterior
  - Interior surface of containers to be treated with a MAF approved residual pesticide
  - Obvious exterior and interior contaminants such as soil or vegetation to be removed
  - Before closing the doors apply a non-residual knock down pesticide to the interior void of the container (5 second 'burst' of Pestigas)
  - Livestock containers to be cleaned and or disinfected
  - Animal bedding such as meadow hay should not be unloaded or disposed of on the Chathams

### 6.1.3 Biosecurity risk associated with sea cargo

With sea providing the main freight link to the Chathams, ship's cargoes can comprise of everything imaginable and constitute a significant biosecurity risk. Attempting to compile a complete list of potential *risk cargo* for which to apply rules to is probably not a useful approach as everything from building aggregate to vehicles and from livestock to nursery plants may be part of the manifested cargoes. However there are some types of freight or risk cargo that need to be considered as constituting a high biosecurity risk and should be required to meet some minimum quarantine requirements.

#### Types of high-risk cargo

For the purposes of this strategy, *risk cargoes* may be one of two types:

- (i) When the cargo itself is an unwanted pest, e.g deer, rabbits, pest plants or pest fish.
- (ii) When the cargo is contaminated or harbours pests.

#### Type i.

This risk cargo (pests) is governed by legislation and rules, however regulations alone will not adequately deal with the risk, particularly if there is limited capability for monitoring and enforcement. As with any biosecurity system, awareness and education will be the best means of providing shipping companies, consignors, consignees and casual observers with the knowledge to help prevent or report the intentional or unintentional transport of pests to The Chathams. Specific biosecurity

awareness and reporting provisions are outlined in more detail in the communications strategy.

Type ii.

This type of risk cargo is more problematic as potentially nearly all goods could be contaminated or harbour pests. Risk pathways and associated recommendations have been identified for the three broad groups of pests bullet pointed below:

- Pest animals/ invertebrates
- Pest plants
- Plant and animal diseases

Pest animals (eg rabbits, frogs, mustelids, wasps)

If effective pest programmes are in place on the vessels and at freight consolidation and wharf loading areas animal infestation from these sites is unlikely. Infestation of freight prior to arrival at the port or yard is a possibility however.

Pest plants (eg heather, NZ toe toe, broom)

Seed is the most likely form by which pest plants could be transported to the Chatham Islands. Weed seed can either 'hitchhike' on items such as used vehicles and machinery, or be a contaminant in material such as building aggregate, plant growing media (soil, peat bark) or agricultural seed.

Plant and animal disease and parasites (eg sheep measles, plant pathogens)

No animal diseases are specifically listed in the Pest Management Strategy, however people importing or sending animals to the Chathams should ensure the animals are fit and healthy and that livestock have recent drench or dosing histories, including treatment for external parasites such as cattle tick.

No plant diseases are specifically listed in the Pest Management Strategy however the introduction of new plant pathogens might constitute risks to the conservation estate, agriculture and forestry. People importing or sending plants to the Chathams should ensure the plants are healthy and have had a fungicidal/insecticidal treatment.

### ***Recommendations***

- Prior to loading, cargo is to be visually inspected for pests or evidence of pest activity and contaminants by cargo handlers. If pests are found effective treatment will be undertaken.
- Freight will need to meet a minimum standard/s for cleanliness including:
  - No obvious contaminants (soil, manure, plant material)
  - Steam-cleaning of vehicles and farm machinery with particular attention to areas where seed and soil can gather
  - Removal or treatment of ponded water
- Growing media and building aggregate need to be weed free. Standard soil sterilisation techniques should be used prior to shipping if required. Aggregate should be obtained from a weed free quarries.

- Pasture or crop seed will need to be accompanied by a “Purity and Germination Certificate”, which identify the seed has been screened for ‘non-crop’ species.
- Specific biosecurity training for loaders/freight handling staff. (Accredited Person Training)
- The communication strategy will highlight to industry, community groups and individuals the importance of ensuring plants and animals have been treated for pests, parasites and pathogens before leaving New Zealand.

#### **6.1.4 Biosecurity risk associated with other vessels/shipping**

Vessels other than scheduled freight services regularly sail between New Zealand and The Chathams, in particular the commercial fishing fleet. For the 2004-2005 fishing season 88 permits have been issued to land catch on the Chathams, with 30 of these permits being granted to non-Chatham based companies (FishServe data, March 2005). If freight, equipment or personal effects are landed, similar biosecurity risks as outlined for the commercial freight shipping services could also apply. However this potential risk pathway would be difficult to quantify, monitor and manage.

In addition to the fishing fleet, an unspecified number of other commercial, recreational and government owned vessels periodically anchor on The Chathams.

#### ***Recommendations***

- The Communications Strategy will target the commercial fishing industry and other vessel operators who land on the Chathams. This will cover education and awareness about unwanted pests, the biosecurity risk posed by some items and how to recognise and deal with basic quarantine issues.

### **6.2 Air Transport**

Air Chathams is the main commercial air service operator currently providing scheduled flights between New Zealand and the Chathams. Passengers and freight are flown from Auckland, Wellington and Christchurch to Inia William Tuuta Memorial Airport (Waitangi Airport). Port Hutt Aviation also runs a freight service out Waitangi Airport.

#### **6.2.1 Biosecurity risk associated with freight and freight consolidation areas**

Airfreight tends to undergo closer scrutiny due to the requirements of weight allocation and checks for potentially dangerous goods. This could also provide a good opportunity by loaders to make visual checks for potential pest problems.

Generally the type of freight carried is ‘cleaner’ and of higher value by weight than carried by sea. Biosecurity risk still exists however, as some potentially high-risk items

such as scientific equipment, fresh plant material/nursery stock and some animals such as pets and poultry are more likely to be transported by air.

Freight is consolidated on premises near or at Christchurch, Wellington and Auckland airports that have at least rodent control programmes in place.

### **Recommendations**

- Establish integrated pest management programmes

#### Key components

- Rodent control
  - Crawling and flying insect control
  - On site capability to deal with insect pest finds
  - Site or freight treatment if significant or persistent pest problems are identified
  - Additional monitoring/surveillance programs for specific pests if required
- Specific biosecurity training for loaders/freight handling staff (Accredited Person Training).

### **6.2.2 Biosecurity risk associated with passengers and baggage**

Passengers and accompanied baggage create a separate risk pathway to airfreight. Returning residents, workers and tourists can all wittingly or unwittingly transport pests to The Chathams. Garden/nursery plants and contaminated outdoor equipment are several examples of potential mechanisms for pests to move from New Zealand to The Chathams in a matter of hours.

Border control or screening procedures for passengers or their baggage does not exist nor is it feasible at this point. Systems such as honesty bins etc have been investigated but initial indications are they would be unwieldily to manage and their actual effectiveness questionable.

Education and awareness will be the most useful approach to reduce the risk of an air traveller transporting a pest. The depth and targeting of the communications strategy will be critical to ensure not only visitors to The Chathams are made aware of biosecurity risks but also their first points of contact. These may be tourism operators, residents and industry or community groups.

It is important to note here that as far as possible the strategies for managing pest risks pathways identified in this document have been aimed at a pre-border level, i.e. before the pests arrive. Any methods, including the communications strategy, for targeting visitors or residents as they are in transit to the Chathams will create an expectation that biosecurity issues will be dealt with if reported.

## ***Recommendations***

- Communications Strategy. Education and awareness targeted at passengers and also individuals or groups likely to be a 'first contact' for visitors
- The Chatham Island Council to establish capability to respond to reported or suspected biosecurity breaches

## **7. Contingency planning**

The Chatham Island Pest Management Strategy identifies the need for a contingency plan/s should an unwanted pest be detected. It also acknowledges that the Department of Conservation has developed a plan/s for use on off-shore islands.

Primarily the strategies outlined in this document have endeavoured to mitigate risk before pests reach the Chatham Islands, however, even where stringent pre-border and border control exists as between New Zealand and the rest of the world, unwanted pests still evade measures put in place to stop them.

A great deal of effort can be put into contingency planning. The Foot and Mouth Disease Plan maintained by the Ministry of Agriculture and Forestry, is a good example of a highly detailed plan. Although the development of specific contingency responses will be appropriate to deal with key pests some fundamental generic requirements around contingency planning need to be considered:

## ***Recommendations***

- Develop a generic contingency plan provisions that will:
  - identify key responsibilities
  - establish key inter agency relationships and communication channels
  - establish a mechanism for assessing risk and the cost/benefit of control or eradication
  - identify sources of science advice
  - identify reliable short term funding mechanisms (fighting fund)
  - identify potential key service providers
- Develop pest specific contingency responses for key unwanted pests

## **8. Surveillance**

Early detection of pests through surveillance is an important aspect of any biosecurity system as it provides managers with a full range of response options:

- Eradication
- Containment
- Control/management
- Do nothing

The more established a pest becomes the less likely eradication or even containment will be available as an option. Management/control or no response becomes more likely as a pest increases in number and distribution.

Currently baseline data about the occurrence of some pests on The Chathams is variable. The Department of Conservation monitors for the presence of potential conservation pests and there are periodic collection surveys conducted by Crown Research Institutes. There is no regular 'risk' site surveillance for new pests.

### **8.1 Risk site surveillance**

Risk sites are essentially locations where there is a higher likelihood of a new pest incursion occurring. For the New Zealand high-risk surveillance programme these include ports, airports, transitional facilities and military bases. On the Chathams these might include ports, the airport, first night camp grounds/accommodation, major construction sites or scientific bases (temporary and permanent).

Risk site surveillance can be a mix of both active techniques (trapping for insects, animals etc) and directed techniques (visual/sampling surveys using prescriptive protocols).

The actual number of sites, optimal frequency of inspections and methods for The Chathams could be developed relatively quickly using a mix of currently available methodologies.

#### ***Recommendations***

- Identify 'risk sites' on The Chathams where new pests are more likely to establish
- Conduct biannual 'risk site' surveillance for new pests

## **9. Audit and review**

Nearly all of the proposed measures outlined in the strategy need wide cooperation and 'buy-in' to be effective. Even small changes to deal with biosecurity risk will require an acceptance that it 'is all worth while'. A truly effective system will rely very much on self-regulation, in effect a form of quality management system. As with any quality system an audit and review process to ensure efficacy and to bring about improvements should be implemented. This will also provide the opportunity to document procedures, maintain momentum and provide on-going training for key people involved in biosecurity.

#### ***Recommendations***

- Develop an audit and review process for the proposed biosecurity measures.

## **10. Accredited person training**

In developing this document it became clear that staff involved with shipping and the handling of freight could play a key role in protecting the Chathams from unwanted pests. These individuals are ideally placed to inspect, advise, treat and report on biosecurity issues. Currently the level of biosecurity awareness amongst this group is variable and a base level of training about unwanted pests and biosecurity/quarantine inspection is seen as a priority.

Accredited Person Training is a programme that has been developed and approved by the Ministry of Agriculture and Forestry for teaching basic biosecurity awareness to people who unload and handle imported containers. These half-day courses are run by private training providers and tend to deal with biosecurity in the New Zealand border context. The content could be expanded/modified to give a Chathams biosecurity focus.

### ***Recommendations***

- Provide biosecurity awareness training to key staff involved with handling air and sea freight. This training will be structured along similar lines to MAF 'Accredited Person' Training.

## **11. Communications Strategy**

Visitors and residents travelling to New Zealand from other countries generally have awareness about the importance of biosecurity. A similar sort of awareness needs to be fostered for visitors and residents travelling or returning to the Chatham Islands.

The people and groups this strategy aims to reach include residents living on the Chathams, industry groups, short or long-term visitors and businesses involved with the transport of people and freight. It is hoped that both a general and targeted approach when implementing the communications strategy will reach as wide an audience as possible.

This document has not attempted to address marine biosecurity risks at this point in time, however for practical reasons the communications strategy will include messages and information about marine biosecurity in order to be complete and 'future proof' communications collateral (leaflets, posters etc).

There will need to be dialogue with other agencies including Biosecurity New Zealand and the Department of Conservation to share knowledge and coordinate communication activity with any other programmes that may be running concurrently.

## **Draft Communications Strategy for Chatham Islands Border Protection (Ecan Communication Group)**

The pest management strategy for the Chatham Islands specifies advice and education as a principal measure in effectively managing pest plant and animals on the islands. It says:

“Advice and Education on pests on the islands will be provided to encourage land occupiers and other parties such as those providing services to the island (eg sea, air and tourism operators) to efficiently and effectively control pests.”

### **Purpose**

This communications strategy outlines the advice and education components that will be used to prevent unwanted animals and plants from arriving on the Islands.

### **Message**

The key message is that pest plant and animal issues in the Chatham Islands are different from the rest of New Zealand, and maintaining the difference is important for the economic wellbeing of the Chatham Islands.

### **The Audience**

The audience for this strategy is made up of the groups involved with moving people and freight to and from the Chatham Islands and also locals.

The main groups in this “audience” are chiefly:

- Shipping operators
- Air operators
- Tourist operators
- Freight companies and suppliers
- Fishing operators
- Residents
- Regular visitors (industry, government agencies – e.g Ministry of Education, Department of Conservation, scientific community)
- Chatham Islands Council

### **Method**

- Printed products: mainly a manual, a poster, brochures and high impact signs
- Web page/links
- Regular communication
- Training of commercial operators
- Education of Chatham Island residents

## Actions

**Communication strategy:** (✓ indicates priority for completion)

	Communications Material	Target audience	Where
✓	Brochure outlining the biosecurity threats posed by prohibited organisms. Will include examples of risk pathways that reader can relate to.	<ul style="list-style-type: none"> <li>▪ Visitors</li> <li>▪ Residents</li> <li>▪ Commercial Transport/ tourism operators</li> <li>▪ Suppliers</li> <li>▪ Commercial fisherman who land catch on the Chathams</li> <li>▪ Farmers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tourism operators premises incl: accommodation houses, transport operators, visitor centres</li> <li>▪ Chatham Island Council</li> <li>▪ DOC</li> <li>▪ Suppliers premises eg stock and station companies</li> <li>▪ Direct mail to Fishers using FishServe data.</li> <li>▪ Direct mail using Federated Farmers data.</li> </ul>
✓	High impact signs	<ul style="list-style-type: none"> <li>▪ Air Travellers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Departure points:</li> <li>▪ Christchurch</li> <li>▪ Wellington</li> <li>▪ Auckland</li> <li>▪ Entry Point:</li> <li>▪ Inia William Tuuta Memorial Airport (Waitangi Airport)</li> </ul>
	Laminated seat pocket card	<ul style="list-style-type: none"> <li>▪ Air travellers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Scheduled commercial flights to the Chathams</li> </ul>
	High impact signs	<ul style="list-style-type: none"> <li>▪ Commercial shipping</li> <li>▪ Tourist operators</li> <li>▪ Temporary workers on the island</li> <li>▪ Recreational craft operators</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ports:</li> <li>▪ Waitangi</li> <li>▪ Kaingaroa</li> <li>▪ Owenga</li> <li>▪ Port Hutt</li> <li>▪ Flower Pot (Pitt Island)</li> </ul>
✓	Updateable manual for commercial transport and freight operators. Will list specific unwanted pests, risk goods, treatment requirements/ options and contact lists.	<ul style="list-style-type: none"> <li>▪ Shipping operators (all loading locations)</li> <li>▪ Commercial air service operator (all loading locations)</li> <li>▪ Organisations or groups involved in significant travel or trade with the Chathams</li> </ul>	<ul style="list-style-type: none"> <li>▪ Napier – Reef Shipping</li> <li>▪ Timaru – Leslie Shipping</li> <li>▪ Auckland – Air Chathams</li> <li>▪ Wellington – Air Chathams</li> <li>▪ Christchurch – Air Chathams</li> <li>▪ Chatham Island Council - Waitangi</li> <li>▪ DOC (Chathams) – Waitangi</li> <li>▪ DOC (Wellington) – Wellington</li> <li>▪ Federated Farmers, MAF</li> </ul>
	Poster outlining the biosecurity threats posed by prohibited organisms. Will include examples of risk pathways that audience can relate to.	<ul style="list-style-type: none"> <li>▪ Visitors</li> <li>▪ Commercial operators</li> <li>▪ Government agencies</li> <li>▪ Schools?</li> </ul>	<ul style="list-style-type: none"> <li>▪ As appropriate</li> </ul>
✓	Develop an Internet web page or links about biosecurity issues affecting the Chathams.	<ul style="list-style-type: none"> <li>▪ Visitors</li> </ul>	<ul style="list-style-type: none"> <li>▪ Links, web page or biosecurity information as part of <a href="http://www.Chathams.com">www.Chathams.com</a></li> </ul>
	A communication channel either an electronic or	<ul style="list-style-type: none"> <li>▪ Visitors</li> <li>▪ Residents</li> </ul>	<ul style="list-style-type: none"> <li>▪ As appropriate</li> </ul>

	<b>Communications Material</b>	<b>Target audience</b>	<b>Where</b>
	printed update modelled on Environment Canterbury's "Fast Facts".	<ul style="list-style-type: none"> <li>▪ Commercial Operators</li> <li>▪ Government Agencies</li> <li>▪ Major suppliers</li> <li>▪ Federated Farmers</li> <li>▪ Schools</li> </ul>	

### Programmes:

	<b>Programme type</b>	<b>Focus</b>	<b>Where</b>
✓	An education programme for Chatham Islands residents	This would focus on the importance of biosecurity in protecting biodiversity and production on the islands.	Chatham
✓	Modified MAF Accredited Person Training for commercial freight operations staff	Would focus on general biosecurity awareness with specific reference to the risks to the Chathams	Courses currently run in: Auckland, Wellington and Christchurch for people handling shipping containers.
✓	Promote biosecurity contact number/s	All groups	Primary contact on the Chathams – Chatham Island Council Primary contact in New Zealand – Environment Canterbury (ECan)

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## APPENDICES

# Appendix I

## Biosecurity strategy matrix

Pest/ pest group	Measures outlined in the Chatham Island Pest Management Strategy	Proposed biosecurity/ quarantine measures	Key groups involved in mitigating risk	Communication strategies
Pest animals that could be transported intentionally or unintentionally as pets, farm stock or for sport. (Includes deer, rabbit, hare, magpie, rosella, Chinchilla, mustelids, frogs and freshwater fish)	<ul style="list-style-type: none"> <li>▪ Rules</li> <li>▪ Advice</li> <li>▪ Enforcement</li> <li>▪ Education</li> <li>▪ Compliance with statutory procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prohibited from loading or transport aboard any vessel or aircraft</li> <li>▪ Quick reporting mechanism for biosecurity issues</li> </ul>	<ul style="list-style-type: none"> <li>▪ Commercial freight companies and staff.</li> <li>▪ Any operators of commercial or recreational vessels and aircraft.</li> <li>▪ Chatham Island Council</li> </ul>	<ul style="list-style-type: none"> <li>▪ General awareness leaflets.</li> <li>▪ Updateable manual for freight operators listing specific unwanted pests, risk goods, treatment requirements/options and contact list.</li> </ul>
Pest animals that could be transported unintentionally as stowaways (Includes mustelids, rodents, social wasps, ants and any other invertebrate)	<ul style="list-style-type: none"> <li>▪ Rules</li> <li>▪ Advice</li> <li>▪ Enforcement</li> <li>▪ Education</li> <li>▪ Quarantine</li> <li>▪ Compliance with statutory procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Integrated pest management programmes applied at point of loading or to conveyance.</li> <li>▪ Treatment of contaminated material.</li> <li>▪ Prophylactic treatments to conveyances and freight handling facilities such as containers.</li> <li>▪ Rapid reporting mechanism for biosecurity issues</li> <li>▪ Monitoring for presence at designated 'risk' sites on the Chathams.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Commercial freight and passenger operators and their staff.</li> <li>▪ Any other operator of a commercial or recreational vessel or aircraft.</li> <li>▪ Tourism operators</li> <li>▪ Visitors</li> <li>▪ Residents</li> <li>▪ Suppliers</li> <li>▪ Government agencies</li> <li>▪ Chatham Island Council.</li> </ul>	<ul style="list-style-type: none"> <li>▪ General awareness leaflets</li> <li>▪ Modified MAF Accredited Person Training for commercial freight operations staff</li> <li>▪ An education programme for Chatham Islands residents</li> <li>▪ A communication channel either an electronic or printed update modelled on Environment Canterbury's "Fast Facts".</li> <li>▪ Poster outlining the biosecurity threats posed by prohibited organisms. Will include examples of risk pathways that audience can relate to.</li> <li>▪ High impact signs: Entry and exit locations (NZ, Chatham) and landing wharfs (Chatham, Pitt)</li> </ul>

Pest/ pest group	Measures outlined in the Chatham Island Pest Management Strategy	Proposed biosecurity/ quarantine measures	Key groups involved in mitigating risk	Communication strategies
				<ul style="list-style-type: none"> <li>▪ Laminated seat pocket card for aircraft.</li> </ul>
Pest Plants	<ul style="list-style-type: none"> <li>▪ Rules</li> <li>▪ Advice</li> <li>▪ Enforcement</li> <li>▪ Education</li> <li>▪ Quarantine</li> </ul>	<ul style="list-style-type: none"> <li>▪ Treatment of contaminated material (including cleaning to remove soil and seed)</li> <li>▪ Treatment of building aggregate and growing media if required.</li> <li>▪ Reporting on the freight of garden or potted nursery plants.</li> <li>▪ Seed sourced from reputable merchants who can supply Purity and Germination certificates.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Commercial freight and passenger operators and their staff.</li> <li>▪ Any other operator of a commercial or recreational vessel or aircraft.</li> <li>▪ Tourism operators</li> <li>▪ Visitors</li> <li>▪ Residents</li> <li>▪ Suppliers</li> <li>▪ Government agencies</li> <li>▪ Chatham Island Council</li> </ul>	<ul style="list-style-type: none"> <li>▪ General awareness leaflets. Updateable manual for freight operators listing specific unwanted pests, risk goods, treatment requirements/options and contact list.</li> <li>▪ Modified MAF Accredited Person Training for commercial freight operations staff</li> <li>▪ An education programme for Chatham Islands residents</li> <li>▪ A communication channel either an electronic or printed update modelled on Environment Canterbury's "Fast Facts".</li> <li>▪ Poster outlining the biosecurity threats posed by prohibited organisms. Will include examples of risk pathways that audience can relate to.</li> <li>▪ High impact signs: entry and exit locations (NZ, Chatham) and landing wharves (Chatham, Pitt)</li> <li>▪ Laminated seat pocket card for aircraft.</li> </ul>

## Appendix II Biosecurity/Quarantine Strategy – Development Process

