Chatham Island fantail, Chatham Island tomtit and Chatham Island warbler recovery plan

2001-2011

THREATENED SPECIES RECOVERY PLAN 46

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Cover: Female Chatham Island tomtit. (Colin Miskelly)

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Recovery plans

This is one of a series of recovery plans published by the Department of Conservation. Recovery plans are statements of the Department's intentions for the conservation of particular plants and animals for a defined period. In focusing on goals and objectives for management, recovery plans serve to guide the Department in its allocation of resources, and to promote discussion amongst a wider section of the interested public.

After a technical report which had been refined by scientists and managers both within and outside the Department had been prepared, a draft of this plan was sent to the New Zealand Conservation Authority and relevant Conservation Boards for comment. After further refinement, this plan was formally approved by the Wellington Conservator in January 2001. A review of this plan is due after ten years (in 2011), or sooner if new information leads to proposals for a significant change in direction. This plan will remain operative until a reviewed plan is in place.

The Department acknowledges the need to take account of the views of the tangata whenua and the application of their values in the conservation of natural resources. While the expression of these values may vary, the recovery planning process provides opportunities for consultation between the Department and the tangata whenua. Departmental Conservancy Kaupapa Atawhai Managers are available to facilitate this dialogue.

Comments and suggestions relating to the conservation of Chatham Islands forest birds are welcome and should be directed to the recovery group via the Wellington Conservancy office of the Department.

1. Introduction

The Chatham Island fantail *Rhipidura fulginosa penitus* is an endemic subspecies of the New Zealand fantail. The plumage differs slightly from the pied colour-phase of the New Zealand fantail, having pure white rectrices with a grey outer edge (Fleming 1939).

The Chatham Island tomtit *Petroica macrocephala chathamensis* is recognised as a subspecies of the endemic tomtit found in the New Zealand region. It is most similar in plumage to the South Island tit *P. macrocephala macrocephala*. CI tomtits are perhaps best known for their role as foster parents of black robin eggs and chicks during the 1980s (Butler & Merton 1992).

The Chatham Island warbler *Gerygone albofrontata* is an endemic warbler confined to the Chatham Islands. Like the grey warbler (*G. igata*) in New Zealand, CI warblers are occasionally parasitised by shining cuckoos. CI warblers were also used as foster parents during the black robin recovery programme (Butler & Merton 1992).

The loss and degradation of large areas of forest habitat on the Chatham Islands has meant a considerable decline in the populations of these three species, justifying conservation management. The Department of Conservation currently ranks all three species as Category C, the third priority category for conservation management (Molloy & Davis, 1994). All three are ranked as Vulnerable using the IUCN Red List Categories (IUCN 1994).

This plan establishes a long-term goal of regular population monitoring for CI fantail, CI tomtit, and CI warbler over the next ten years, with re-introductions of CI tomtit to Chatham Islands and, if required, of CI warbler to northern Chatham Island forest remnants.

2. Past/present distribution and population number

CHATHAM ISLAND FANTAIL

CI fantails are presumed to have a small total population size and are known to experience frequent fluctuations in population numbers. They are currently present on Chatham, Pitt, and Rangatira Islands and have been seen occasionally on Mangere (Baird pers. comm.). Fleming (1939) recorded CI fantail as common, although in lesser numbers on Rangatira, where both Chatham Island tomtit and Chatham Island warbler were present. The 1954 Chatham Islands Expedition recorded CI fantail at Kaingaroa and around Te Whanga Lagoon on Chatham Island, and few CI fantails on Rangatira (Dawson 1955). Lindsay et al. (1959) recorded CI fantail as very common on Chatham

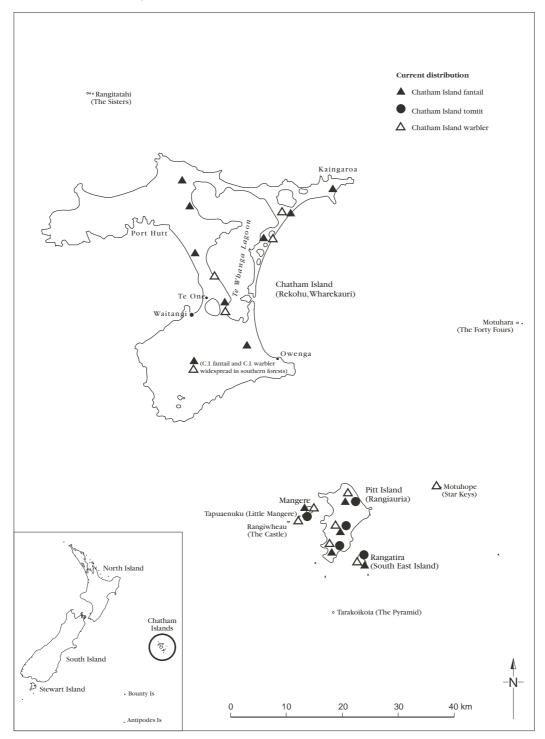


Figure 1. Distribution of CI fantail, CI tomtit and CI warbler - present day.

and Pitt Islands. Merton & Bell (1975) noted that there were no records of it occurring on Mangere and that, in 1968, CI fantails were absent from Rangatira, but they were back again in low numbers by 1973. There are various accounts of major population declines and recoveries for this species on the Chatham Islands. For example, there was an observed decline in the CI fantail population during 1998, but more birds were being sighted by March 1999 (M. Bell pers. comm.). However, there is a lack of quantitative information on its population status throughout its range.

There is no reliable estimate of the present day population of CI fantail on any of the islands within its range. A survey of forest birds by Grant (1991) provided information on the distribution and density of CI fantails in the late 1980s on Chatham and Pitt Islands, but a similar survey of numbers has not been carried out on Rangatira. CI fantails were found to be relatively common on Chatham and Pitt Islands in the 1980s. Five-minute forest bird counts undertaken on Pitt Island from 1996 to 1999 found CI fantail to be abundant in all years except 1999, when they declined dramatically in numbers (S. King unpublished data).

CHATHAM ISLAND TOMTIT

Dieffenbach described the CI tomtit in 1840, Buller obtained specimens in 1855, and Travers brought one back from Pitt Island in 1871 (Oliver 1955). Fleming (1939) provided the first description of CI tomtit distribution, stating that it appeared to have disappeared from Chatham Island, except in parts of southern Chatham Island, where they were not plentiful. Fleming also saw CI tomtits on Pitt Island, Mangere and Tapuaenuku (Little Mangere) during his visit, as well as on Rangatira, where there was a large population. In 1954, Dawson (1955) reported CI tomtit as being abundant on Rangatira, while Lindsay et al. (1959) reported CI tomtit being present on Chatham Island and frequently observed on the south part of Pitt Island and on Mangere. In 1968 Merton & Bell (1975) failed to locate CI tomtit on Chatham Island or on Tapuaenuku, but found it in small numbers on Mangere and Pitt Island, and it was abundant on Rangatira. The last confirmed sighting of CI tomtit on Chatham Island was near the Horns in 1976 (L. Howell pers. comm.).

CI tomtits were removed from Tapuaenuku and Mangere Islands in 1976 to reduce competition with the tiny black robin population. CI tomtits were reintroduced to Mangere in 1987, but it was not until 1992 that they appeared to be firmly established. CI tomtits were re-introduced to the Tuku Valley, Chatham Island, in 1998, but no birds appeared to have survived a year later (M. Bell pers. comm.). Today, CI tomtits are found on Rangatira, Mangere and Pitt Island, with population estimates of 200–300, 70–100, and 500 birds, respectively (Powlesland et al. in prep.).

While the present population of CI tomtit is estimated at between 500 and 1000 birds, no census results are available. A survey of forest birds in the late 1980s recorded no CI tomtits on Chatham Island, but moderate numbers on Pitt Island (Grant 1991). A similar survey of CI tomtit numbers has not been carried out on Rangatira or Mangere. Five-minute forest bird counts undertaken on Pitt Island from 1996 to 1999 found the tomtit to be common (S. King unpublished data).

They were in highest numbers in the Ellen Elizabeth Preece Conservation Covenant and least common in the southern reserves.

CHATHAM ISLAND WARBLER

CI warbler is present on Rangatira, Mangere, Tapuaenuku, Star Keys, Pitt Island, and Chatham Island. Fleming (1939) noted that the CI warbler was the commonest native passerine in the Chathams, but that they had declined in northern Chatham Island. Also, he commented that it did not inhabit modified areas to the extent that grey warbler do in New Zealand. The 1954 Chatham Islands Expedition recorded CI warbler in bush on the southern shores of Te Whanga Lagoon and Lake Huro, and on Rangatira, but not in northern Chatham Island (Dawson 1955). Lindsay et al. (1959) recorded warblers as being absent from the north half of Chatham Island, in fair numbers on southern Chatham Island, and uncommon on southern Pitt Island. Various published accounts state that it is either abundant (Merton & Bell 1975), common (Robertson & Dennison 1984), or with a very local distribution (Heather & Robertson 1996, quoting B.D. Bell). This may indicate either a fluctuating population and/or lack of quantitative information on its population status.

The only quantitative information on its population comes from Merton & Bell (1975), who, in 1968, estimated 600 CI warblers to be in the 40 ha of Tapuaenuku, a density of 15 warbler/ha. Fleming (1939) commented that CI warblers were more common on Rangatira than grey warblers in forests in New Zealand.

There is no reliable estimate of the present population of CI warblers on any of the islands in its range. A survey of forest birds by Grant (1991) provided information on the distribution and relative density in the late 1980s of CI warbler on Chatham and Pitt Islands, but a survey of warbler numbers has not been carried out on Rangatira, Mangere, Tapuaenuku, or Star Keys. CI warblers were relatively common in parts of Chatham and Pitt Islands forests in the 1980s (Grant 1991). Five-minute counts undertaken on Pitt Island from 1996 to 1999 found warblers to be common (S. King unpublished data). There was only minor variation in numbers recorded between years, and numbers were lowest in the southern forests.

3. Cause of decline, and threats

The principal reason for the decline of CI fantail, CI tomtit, and CI warbler is thought to be deterioration and loss of forest habitat through burning and clearance for farmland, browsing by sheep, cattle, pigs and possums, removal for firewood, and from the effects of wind.

Predation from cats, rodents and possibly possums, preying on eggs, chicks and adults is likely to have contributed to the decline of CI tomtits. Predation by

introduced mammalian predators may be less significant in the decline of CI fantail and CI warbler on Chatham Island. Warblers spend most of their time foraging in the canopy, and their suspended nests are relatively inaccessible to mammalian predators (Dennison et al. 1984; Robertson & Dennison 1984). However, Dennison et al. (1984) suggest that the presence of predators may explain the lower densities of CI warbler on Chatham compared to Rangatira and Mangere.

The episodic decline and recovery of CI fantail populations appears to be in response to climatic conditions, where storm events over many days' duration make it difficult for CI fantail to find sufficient prey (Nilsson et al. 1994). The absence of CI fantail from Rangatira in the 1970s is likely to have been due to the lasting effects of forest clearance and the heavy grazing of understorey tiers by sheep, which were present on the island until 1961. With the removal of sheep and regeneration of the forest, a denser understorey has developed. This provides more suitable habitat for CI fantails, which spend much of their time in the understorey of the forest.

The reasons for the CI tomtit decline in the past still threaten the population today. Predation by mammals is probably the most important factor that limits CI tomtit population recovery on Chatham and Pitt Islands. The recent improvements to the Tuku Nature Reserve, for the benefit of taiko and parea, were expected to have improved the habitat for other forest birds. However, the failure of the 1998 translocation of CI tomtits to this reserve may indicate further improvement in forest condition is required. The failure of the translocation suggests rat predation is an important factor threatening the reestablishment of CI tomtit on Chatham Island. The limited area of suitable habitat and possible competition with other native forest birds (black robin) and introduced birds (starlings) may limit CI tomtit numbers on Mangere and Rangatira.

Protection of suitable areas of forest habitat will assist CI fantail and CI warbler population management on Chatham Island. However, the ability of CI fantails and CI warblers to re-colonise some areas and maintain viable populations is uncertain. The maintenance of habitat free from browser pressure, allowing development of a dense understorey and deep leaf litter, will be essential for these populations to survive.

4. Species ecology and biology

CHATHAM ISLAND FANTAIL

Information on CI fantail ecology and biology is scarce. It forms monogamous pair bonds and breeds from October to January, raising only two broods a year (Robertson & Dennison 1979). Nests are built 2-3 m above the ground, generally in the understorey. Most clutches are of three or four eggs, and both sexes incubate the eggs and feed the young.

CI fantails are insectivores, and forage in the same manner as other fantail subspecies.

CHATHAM ISLAND TOMTIT

CI tomtits breed from October to January and are highly territorial during the breeding season (Nilsson et al. 1994). The male attracts the female to prospective nest sites, the female choosing one and building the nest. Nests are in trees, low shrubs or vine thickets, generally in a concealed location, including hollows in tree trunks. Clutches are two to four eggs, the female incubates the eggs, and both sexes feed the young. They can rear two broods in a season.

Niche overlap and foraging ecology of CI tomtits and black robins was investigated by McLean et al. (1994). They found that CI tomtits fed mostly in the mid and upper tiers of the forest, while black robins fed more on the ground, thus showing a feeding niche separation for these two related species.

Hybridisation between CI tomtits and black robins has been recorded on a number of occasions (Butler & Merton 1992), but in all cases it has involved black robins that were reared by CI tomtits. It is believed that the future incidence of hybridisation between CI tomtits and black robins is likely to be low, as no cross-fostered black robins now remain in the population.

CHATHAM ISLAND WARBLER

A study of CI warblers between 1977 and 1981 by Dennison et al. (1984) found that they had a short breeding season, produced only one brood a year, and had a high breeding success (87% chicks fledged from eggs laid). This high success rate was explained by the low rate of cuckoo parasitism and absence of predators on Rangatira. Nests are built in trees or tall shrubs 2-6 m above the ground, generally in an open location. Most clutches have three to four eggs, the female incubates the eggs, and both sexes feed the young. CI warblers breed from November to January. Their breeding biology closely resembles that of the grey warbler

Dennison et al. (1984) found CI warblers had high breeding densities on Mangere and Rangatira compared to Chatham Island. Densities were not examined on Pitt Island. The lower densities on Chatham Island were probably due to the presence of mammalian predators.

The use of CI warblers as foster parents in the early days of the black robin recovery programme resulted in some information on warbler breeding biology being obtained (Butler & Merton 1992).

5. Past conservation efforts

The legal protection of Rangatira and Mangere, gazetted in 1954 and 1967 respectively, the removal of stock, and measures to prevent the invasion of mammalian predators have benefited all forest species. The revegetation programme on Mangere will provide for the expansion of the populations of all three species in the long term, in particular CI tomtit. Similarly, forest protection and predator control on Chatham and Pitt Islands has provided improved habitat for all three species on Pitt, and for CI fantail and CI warbler on Chatham Island.

There have been no concerted conservation efforts for the sole benefit of CI fantails or CI warblers.

The intensive recovery programme for the black robin resulted in their eggs and chicks being fostered to CI tomtits during the 1980s. This meant that CI tomtits were also intensively managed. Many CI tomtit nests were protected, including placement in artificial nest boxes, and eggs and nestlings were manipulated to ensure the nests were available if needed for the black robin programme. Detailed information on the CI tomtit's breeding biology was obtained during this period, and this has recently been analysed and written up for publication (Powlesland et al. in prep.).

There have been transfers of CI tomtits in an effort to re-establish populations, one transfer to Mangere in 1987 and one to Chatham Island in 1998. In 1987, once black robins were firmly established on Mangere and were no longer in imminent danger of extinction, CI tomtits were re-introduced to reestablish a self-sustaining population. In 1998, a translocation of CI tomtits from Rangatira to the Tuku Valley on Chatham Island was undertaken. However, this was not successful in establishing CI tomtits and there were no confirmed sightings of the birds subsequent to release.

6. Recovery goal

Two goals are proposed—a longer-term goal and a shorter-term goal. The short-term goal of ten years is to be achieved by the year 2011, which is when this plan expires.

LONG-TERM GOAL

Restore sufficient areas of Chatham Islands' forests so that the total populations of CI fantail, CI tomtit, and CI warbler increase to a level where they are no longer at risk of extinction.

SHORT-TERM GOAL

Protect and restore forest on Rangatira, Mangere, Pitt Island and Chatham Island so that they support viable populations of CI fantail, CI tomtit, and CI warbler.

7. Options for recovery

7.1 OPTION 1

No action

This option is not recommended. CI fantail, CI tomtit and CI warbler are endemic to the Chatham Islands and, having small total populations, are vulnerable to extinction. If no action is taken, no improvement in their conservation status can be expected. The CI tomtit, in particular, has a very limited range, and the fantail is prone to significant population fluctuations due to storm events. Extinction is a possibility if a series of natural or human-induced disasters occurs over a short period, not allowing time for populations to recover.

7.2 OPTION 2 (PREFERRED OPTION)

Protect and restore CI fantail, CI tomtit, and CI warbler habitat on Rangatira, Mangere, Pitt Island and Chatham Island, and work towards re-establishing CI tomtit on Chatham Island and CI warbler to northern forest remnants on Chatham Island

This option is the recommended recovery approach. Protection of the mammalian predator-free status of Rangatira and Mangere provides safe refuges for these species. Over time, the development of a more complex forest structure and the expansion of forest areas on Rangatira and Mangere are likely to benefit all forest species. Protection of forest on Pitt Island and Chatham Island, with their larger blocks of mature and complex forest is essential for the survival and expansion of range of these species.

Fencing of forest habitat is an important first step in forest protection. The maintenance of the understorey tiers of the forest by removing browsing pressure is also essential, particularly for fantails which, spend most of their time in these lower tiers. Browsing stock also open up the forest to the effects of wind making the habitat less suitable for all bird species, particularly fantails. The restoration of areas of forests in northern Chatham Island will provide opportunities for CI fantail and CI warbler to re-establish viable populations. The removal of predation pressure is essential for CI tomtit populations to survive and expand to Chatham Island. Predator control is also likely to result in an increase in CI warbler and CI fantail numbers.

Monitoring of CI fantail, CI tomtit, and CI warbler population trends as part of a regular forest bird monitoring programme is needed to ensure that the current level of forest habitat protection is adequate to protect these species.

8. Objectives for term of plan

The objectives for CI fantail, CI tomtit, and CI warbler recovery for the term of this plan are:

- 1. Protect CI fantail, CI tomtit, and CI warbler populations on Rangatira, Mangere, Pitt Island, and (except CI tomtit) Chatham Island.
- 2. Restore areas of forest habitat on Mangere, Pitt Island and Chatham Island.
- 3. Prepare for the re-establishment of CI tomtit on Chatham Island and CI warbler in northern Chatham Island forests.

9. Work plan

Specific tasks required to achieve each objective, and performance measures to assess success in meeting objectives are set out below.

OBJECTIVE 1. PROTECT CI FANTAIL, CI TOMTIT AND CI WARBLER POPULATIONS ON RANGATIRA, MANGERE, PITT ISLAND, AND (EXCEPT CI TOMTIT) CHATHAM ISLAND

Performance measures

- (1) The CI fantail, CI tomtit and CI warbler populations on Rangatira, Mangere, Pitt Island, and (except CI tomtit) Chatham Island are maintained or increased from their current population levels.
- (2) Sites where legal and/or physical protection would benefit forest birds are identified by 2005 and appropriate mechanisms for progressing protection at each site implemented within the term of the plan.

Explanation

Protection of forest habitat on Rangatira, Mangere, Pitt Island and Chatham Island is essential for the survival of these populations. Natural forest regeneration on Rangatira and Mangere Islands and the revegetation programme on Mangere should provide further forest habitat and more complex forest structure into which the populations can expand. Maintenance of forest reserves and covenants, and securing protection of currently unprotected forest

remnants on Chatham and Pitt Islands will provide additional habitat. Monitoring of the populations will need to be carried out to ensure that this objective is being met.

Actions required

Action 1.1 Implement quarantine measures on Rangatira, Mangere and Pitt Islands

Explanation

These islands provide important habitat and safe refuges for these three species. With forest regeneration, revegetation and protection, the quality of habitat will improve. The arrival of introduced predators or alien diseases to Rangatira and Mangere must be prevented. The risk of habitat loss or deterioration due to human disturbance, the introduction of invasive plant species or fire must also be mitigated. Quarantine measures have in been place on Rangatira and Mangere for many years. New people visiting the island need to be made aware of these measures, and there should be regular audits to ensure they are being followed vigilantly. Rangatira and Mangere are Nature Reserves, and entry is by permit only. Currently, numbers of people permitted entry is restricted, and this needs to continue. Rats and possums are currently not present on Pitt Island, and quarantine measures being implemented in cooperation with the Pitt Island community need to continue to ensure these pests do not arrive there.

Priority

Essential

Responsibility

Chatham Island Area Office

Action 1.2 Control cats and weka in selected areas on Pitt Island and Chatham Island, subject to funding

Explanation

Predator control programmes in forest habitats on Chatham and Pitt Islands will usually be undertaken as part of recovery programmes for more endangered species, but, whenever possible, these programmes will be designed so that a range of forest birds will benefit. Cat and weka numbers are currently controlled to low densities in the Ellen Elizabeth Preece Conservation Covenant on Pitt Island, benefiting CI tomtit and, to a lesser extent, CI fantail and CI warbler. A predator exclosure for black robin which is being constructed at this site will provide further protection for forest species. Predator control is needed in other protected areas on Pitt, particularly Waipaua, for the benefit of a range of forest birds. The reduction in cat and weka numbers around the taiko breeding areas in southern Chatham Island for the benefit of taiko and parea will provide benefits for CI fantail and CI warblers. It has yet to be determined if rodent densities are an important factor in the conservation of CI fantail or CI warbler. As resources permit, predator control measures will be extended to other sites on Chatham Island. An assessment of sites should first be undertaken

to determine where the maximum benefits could be achieved for a suite of species.

Priority

Moderate

Responsibility

Chatham Island Area Office

Action 1.3 Promote the protection of forest habitat on private land on Chatham and Pitt Islands

Explanation

Significant areas of forest habitat on Chatham and Pitt Islands are in private ownership. The conservation of CI fantail, CI tomtit, and CI warbler would be enhanced by the protection of these forest areas, as well as the forest reserves. Fencing domestic stock out of remnant forest areas is urgently required to prevent further habitat deterioration. Reduction of possum, pig and feral stock densities is also needed. Covenants would provide long-term legal protection to these private forest habitats, and negotiations to secure private forest areas as covenants should continue. Resources need to be made available to assist landowners to carry out some of this protection work themselves. Initiatives to protect forest areas will be undertaken to benefit a wide range of forest species, and a land protection strategy is planned to prioritise work in this area.

Priority

Moderate

Responsibility

Chatham Island Area Office

Wellington Conservancy

Action 1.4 Monitor forest bird populations to determine population trends

Explanation

Monitoring of CI fantail, CI tomtit, and CI warbler populations should be undertaken as part of an ongoing programme to monitor trends in the populations of a range of forest bird species. Monitoring on Pitt Island is being done as part of annual five-minute forest bird counts begun in 1996. It is proposed that similar counts of forest birds be undertaken on Rangatira and Mangere, and that a programme for monitoring forest bird species be established on Chatham Island.

Priority

Moderate

Responsibility

Chatham Island Area Office

Wellington Conservancy

OBJECTIVE 2. RESTORE AREAS OF FOREST HABITAT ON MANGERE, PITT ISLAND AND CHATHAM ISLAND

Performance measures

- (1) Reduction of stock to zero densities (or agreed levels in Waipaua) in protected areas identified as priority sites for forest birds, subject to funding.
- (2) The reduction in possum densities to a catch rate of 1 possum or less per 100 trap nights in selected areas on Chatham Island subject to funding (this rate may be increased if it is shown that forest bird populations are stable or increasing in the presence of higher possum densities).
- (3) Planting of native species undertaken on Mangere, to at least the current level each year, using best practice to ensure a minimum survival rate of 70%.

Explanation

The conservation of CI fantail, CI tomtit, and CI warbler depends on structurally diverse forest habitat. Restoration requires improvements to the understorey of many of the forest habitats on Chatham and Pitt Islands, involving removal of feral and domestic stock, pigs and possum. Restoration of forest on Mangere will allow for the expansion of CI fantail, CI tomtit, and CI warbler populations.

Actions required

Action 2.1 Control introduced browsers in selected areas on Chatham and Pitt Islands

Explanation

Introduced browsers are major threats to forest regeneration on Chatham and Pitt Islands. Browsers cause changes in forest composition, and by browsing the understorey, increase the detrimental impacts of wind on regeneration and canopy health. Programmes to reduce domestic and feral stock, including pigs, within Chatham reserves need to continue, with the long-term aim of achieving zero density of stock and sufficiently low densities of pigs for forest regeneration to occur. Regular inspections and maintenance of fences to ensure they are in good condition will be required to prevent stock entry. Possums threaten forest regeneration and cause canopy deterioration. Control of possums around the taiko breeding areas in southern Chatham Island has led to improvements in forest health. When setting priorities for possum control on Chatham Island, consideration needs to be given to determining which areas will provide the greatest benefits to a range of forest species.

Priority

High

Responsibility

Chatham Island Area Office

Action 2.2 Implement revegetation programme on Mangere Island each year

Explanation

The creation of further forest habitat on Mangere will provide for the expansion of the CI tomtit and CI warbler populations. CI fantails have only occasionally been observed on Mangere and may be only visitors to the island. A considerably larger area of habitat may be required before a permanent population of CI fantails can establish. A programme of planting native species to restore forest habitat began in the 1970s and continues today. Options to increase the rate of re-vegetation on Mangere should also be identified and trialed.

Priority

Moderate

Responsibility

Chatham Island Area Office

OBJECTIVE 3. PREPARE FOR THE RE-ESTABLISHMENT OF CI TOMTIT ON CHATHAM ISLAND AND CI WARBLER IN NORTHERN CHATHAM ISLAND FORESTS

Performance measures

- (1) A list of potential sites for release of CI tomtits on Chatham Island prepared by 2005, which includes an assessment of management requirements at each site to enable tomtits to establish.
- (2) Transfer proposal prepared for CI tomtits and a transfer to Chatham Island initiated within the term of this plan, subject to funding.

Explanation

The re-establishment of CI tomtits on Chatham Island will require the control of predators to zero density or exclusion of predators from areas of suitable forest habitat. CI warblers were present in northern Chatham Island until recently. The deterioration of the forest quality, as well as the reduction in area and isolation of forest patches probably caused the loss of CI warbler from these areas. Recent improvements to the condition of forest remnants may still be insufficient to support a viable CI warbler population or the isolation of the forest patches may be preventing re-colonisation. The re-establishment of additional populations of CI tomtit on Chatham Island and CI warbler in northern Chatham Island forests will improve the species' conservation status and restore them to part of their recent historic distribution.

Actions required

Action 3.1 Assess requirements for re-establishing CI tomtit and prepare for a transfer to Chatham Island

Explanation

The forest habitats of southern Chatham Island, particularly the Tuku Nature Reserve, have been proposed as the best location to re-establish CI tomtit on Chatham Island. It is the largest forest patch on the Island, and reduction in animal pests over the last decade has led to an improvement in forest condition. However, the failure of the 1998 transfer to the Tuku Valley indicates that further habitat improvement may be required or other release sites may need to be selected. An investigation into the suitability of forest habitats on Chatham Island for CI tomtit is required, focusing on factors that may limit population establishment. Predation of CI tomtit eggs, chicks and incubating females by rats may be a problem, and rodent control may be necessary at proposed sites. An alternative solution would be the construction of a predator-proof fence around one or more forest reserves on Chatham Island. Intensive monitoring of CI tomtit released into new habitats will be required to gain information on the cause of any losses.

Priority

Moderate

Responsibility

Chatham Island Area Office

Action 3.2 Assess the suitability of northern forest remnants on Chatham Island for CI warblers and, if suitable, reintroduce CI warblers

Explanation

The status of CI warblers in northern forest remnants and the suitability of the habitat for them require ongoing assessment. The absence of CI warbler in these remnants may only be temporary and, as forest condition improves, CI warblers may re-establish self-sustaining populations of their own accord. Reintroduction of CI warbler to these areas should be considered, provided that the habitat has recovered to the extent that it could support a CI warbler population. Such re-introductions are unlikely within the term of this plan, but might be undertaken in conjunction with restoration or community education initiatives. Monitoring of warblers released into new habitats will be required to gain information on the success of the transfer.

Priority

Lower

Responsibility

Chatham Island Area Office

Wellington Conservancy

10. Review date

This plan will be reviewed after ten years, or sooner if new information leads to proposals for a significant change in direction. The plan will remain operative until a reviewed plan is in place. The date that is proposed for review of this recovery plan is **July 2011**.

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