



# BIOSECURITY ANIMALS

## 1 ACTIVITY OVERVIEW

1.1.1 The Biosecurity Animals Activity delivers work across programmes to protect both production and biodiversity values including:

- The Possum Control Programme;
- The Rook Control Programme; and
- The Amenity Pests Programme.

1.1.2 The Animals Activity links with a range of national and regional policies and strategies including the Biosecurity Act 1993, National Policy Direction 2015 and Regional Pest Management Plan 2017-37.

## 2 ANNUAL PLAN TARGETS

2.1.1 A summary of the Annual Plan targets and progress to date is provided in Table 1

Table 1 Progress reporting for the Biosecurity Animals Annual Plan targets for 2020-21.

Performance measure/ contract target	Target	Progress
Possum densities are maintained at/below 10% <b>residual trap catch</b> (RTC) in all existing and new possum control operations. This is to enhance production, biodiversity, disease protection, and amenity values.	<10% RTC	20 of the planned 38 monitors for the 2020-21 year have been completed. The average result for these monitors is 3.1% RTC (+/- 1.2%) with two returning results >10% RTC.
Additional hectares included in [the Possum] Control Programme	6,217 ha	36,920 new hectares were completed during the financial year.
All known rookeries are treated annually to reduce crop losses and damage.	100%	Surveillance and baiting preparation underway
Provide an urban/peri-urban animal pest management service to assist ratepayers with specialist advice and equipment. All enquiries responded to within two working days.	100%	311 enquiries were received during the reporting period. All enquiries were followed up within the agreed timeframes.

## 3 POSSUM CONTROL PROGRAMME

### 3.1 Programme overview

- 3.1.1 The Manawatū-Whanganui Region Possum Control Programme aims to maintain the possum population below a target of 10% **residual trap catch** (RTC) within the area of the programme, consistent with the Regional Pest Management Plan targets. The possum programme started in 2006, covering 110,000 ha, and has grown to include more land every year. Horizons has initiated control in some areas and in others has taken on new areas where the previous possum control organisation, OSPRI, had initiated work for the control and eradication of Bovine Tb. Horizons has, and continues to absorb the areas into its possum control programme following OSPRI ceasing control of particular areas. The Horizons programme is delivered by a combination of council staff (approximately 65%) and external contractors (approximately 35%).
- 3.1.2 In 2020-21 the voluntary possum control programme spans a total area of 1,574,465 ha (approximately 70% of the Horizons region). The total possum control area continues to grow annually as Horizons takes over where OSPRI achieves freedom from Bovine Tb in areas it has previously controlled, and then ceases further pest control. Within the area of the programme in 2020-21:
- Landowners have opted out of 79,174 ha (5%) of the programme;
  - 6,217 ha not previously controlled by Horizons (ex-OSPRI) is being added to the programme.
  - 865,655 ha (55.2% of the total area) is scheduled for maintenance control, i.e. areas that previously have been under Horizons control and will receive bait station fills this year;
  - 556,701 ha (35.5%) of the programme area is being deferred from control due to low possum numbers indicated by the monitoring programme and the projected numbers derived from a population modelling app (PosSim) that assists programme management decision-making.
- 3.1.3 The 2020-21 possum control programme is made up of a total of 153 **Possum Control Operations** (PCOs). The monitoring programme measures possum abundance in 25% of the PCOs to inform decision-making about areas for control, and over a four-year period each of the PCOs is monitored at least once. The growing area of the programme also increases the monitoring programme requirements to ensure each PCO is monitored at least once every four years.

- 3.1.4 Of a possible 153 PCOs, 87 are being worked this year (2020-21) with 66 deferred due to low possum abundance. Of the 87 PCOs being worked, 57 are being completed by Horizons staff and 30 by external contractors.
- 3.1.5 As outlined in the Operational Plan the team are reviewing each PCO being worked this year, analysing results and installing further bait stations where required. The team are also seeking landowners who have previously opted out of the voluntary programme to persuade them to opt in and provide more complete coverage of the region. Following on from last year, the programme enables the team to identify and action second fills of bait stations where high possum abundance is encountered.
- 3.1.6 Landcare Research has been engaged to provide advice regarding the thresholds of possum abundance linked with the size and type of habitat that could trigger Good Neighbour Rules in Horizons **Regional Pest Management Plan** (RPMP) 2017-37. This will provide guidelines that will assist when assessing landowners with higher possum abundance than their adjoining neighbouring properties, and the level that will trigger a regulatory response. This advice has been received and is being considered by staff, and a summary of the report will be presented to Council at a future date.

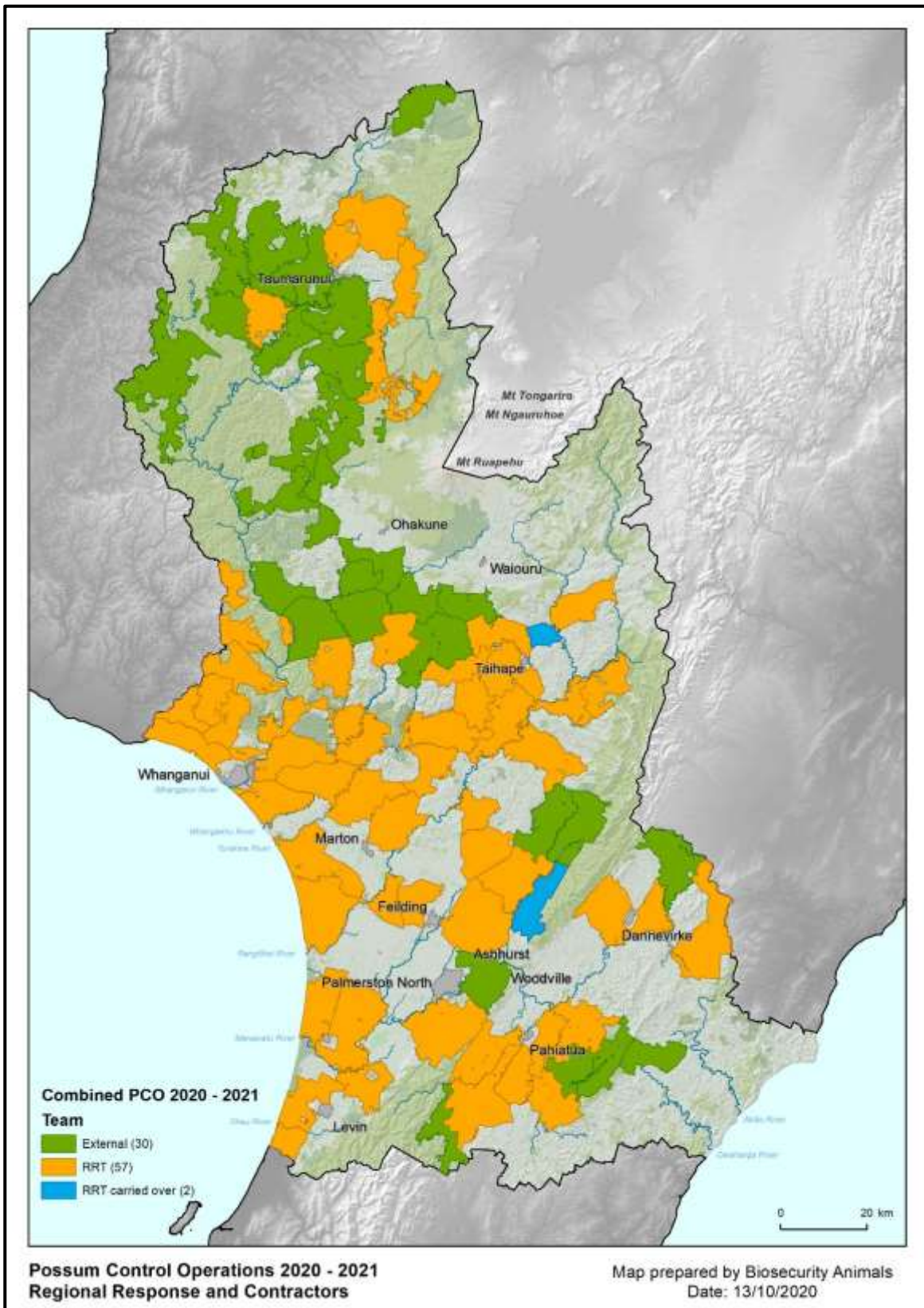
## 3.2 Activity update

- 3.2.1 The Regional Response Team (RRT) has completed 24 of the 57 PCOs planned for the year with another eight operations started. The team carried forward two complete PCOs planned for the previous financial year with a total of 1,412 bait stations. More landowners than usual have opted into the programme this year, including three forestry blocks adding a further 1,200 bait stations.
- 3.2.2 The external contractors continue to make steady progress in the 30 operational areas that are allocated to them this year. One new PCO (Ruatiti Stage Two) was completed during the reporting period and work commenced in another new area (Raetihi Buffer). Operational work has been completed in six maintenance areas – Norsewood, Rangiwaea, North Whangaehu, Raetihi Buffer One, Niho Niho and Tatu Heao. Work also commenced in six maintenance areas – Matahiwi, Kirikau, Taumarunui Rollback South, Waikaka South, Turakina Valley and Parapara.
- 3.2.3 The procurement process to select the contractors for the next three years of PCO work commenced in December. The registration of interest (ROI) document is currently being prepared and was set to be posted on the Tenderlink tenders website in early February.

3.2.4 Horizons have met with the Department of Conservation on several occasions and are encouraging further possum control on conservation land via the Kaimahi for Nature programme that has been allocated Covid-19 recovery funding for additional work in the region.

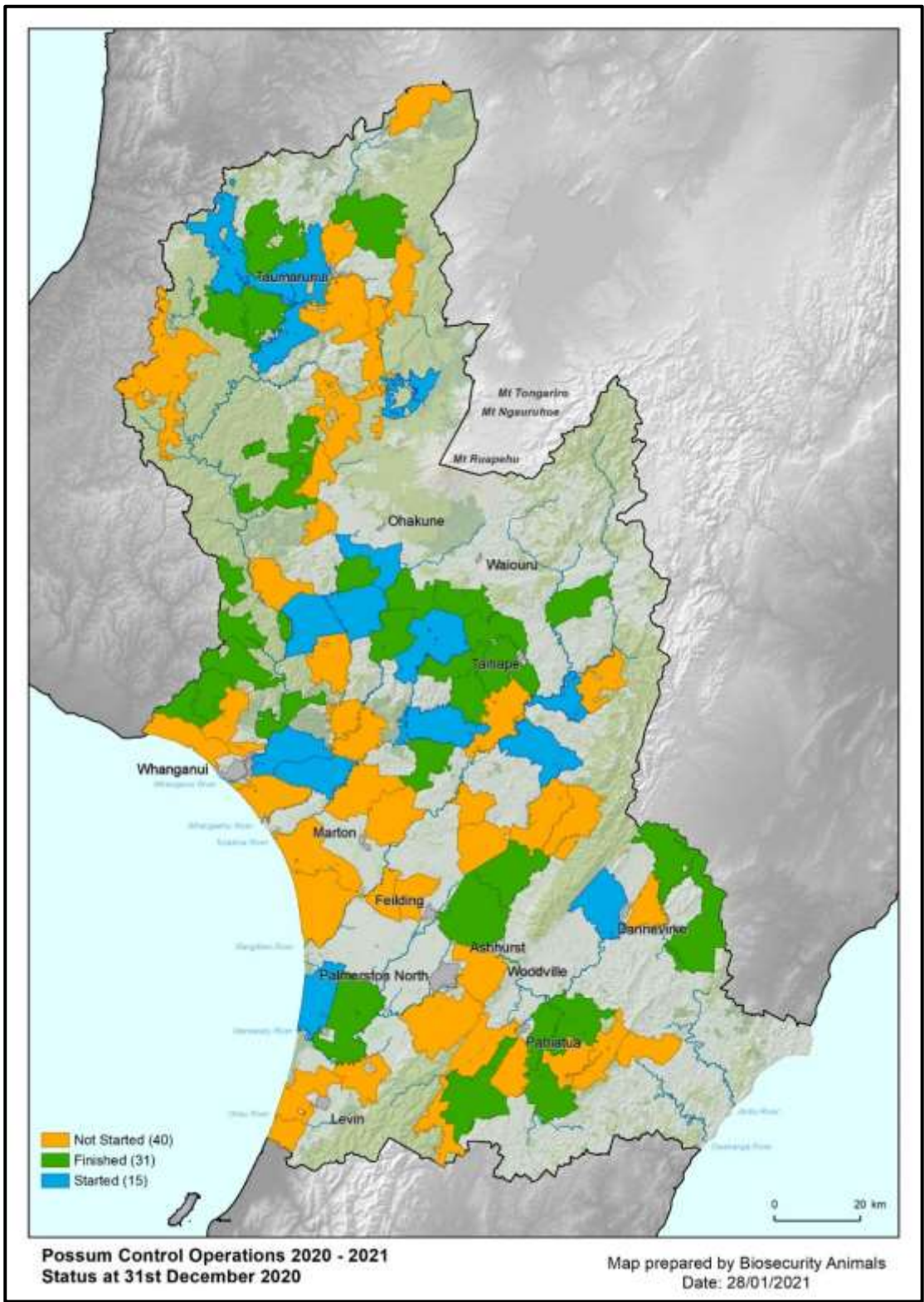
Table 2 Progress reporting for the Possum Control Programme against Operational Plan targets to the end of December 2020.

Measure Hectares	Reporting Period				Total	Op Plan Target	% Complete	Comment
	Period 1 July – Sept	Period 2	Period 3	Period 4				
<b>Regional Response Team</b>								
PCOs completed	8	16			24	57	42%	On track
New hectares completed	1,620	11,000			12,620	41,423	30%	On track
Bait stations	14,158	20,093			34,251	62,014	55%	On track
<b>External Contractors</b>								
PCOs completed	1	7			8	30	27%	On track
New hectares completed	12,200	12,100			24,300	40,462	60%	On track
Bait stations	6,967	12,233			19,200	49,362	39%	On track
<b>Total PCO Programme</b>								
PCOs completed	8	23			31	87	36%	On track
New hectares completed	13,820	23,100			36,920	81,885	45%	On track, Annual Plan target of 6,217 ha met
Bait stations	21,125	32,326			53,451	111,376	48%	On track



Map 1 Possum Control Combined Operations 2020 – 2021.





Map 2 Status of Possum Control Operations 2020 – 2021.

## 4 MONITORING

### 4.1 Possum Monitoring

- 4.1.1 The Possum Monitoring Programme aims to monitor all PCOs during a four-year period to provide an index of possum abundance; this is year three of the programme.
- 4.1.2 The monitoring programme operators put out 25 lines of 10 wax-tags (250 wax-tags) per PCO and the number of bite marks gives an index of the possum abundance as a percentage. The monitoring lines are randomly selected to remove bias and to provide a robust estimate. The results are presented with a 95% confidence interval i.e. the range of values that provides 95% certainty and contains the true mean of the population.
- 4.1.3 The monitoring is predominately done by an independent contractor who is not involved in any of the control work. Some internal team members monitor the possum control work completed by external contractors.

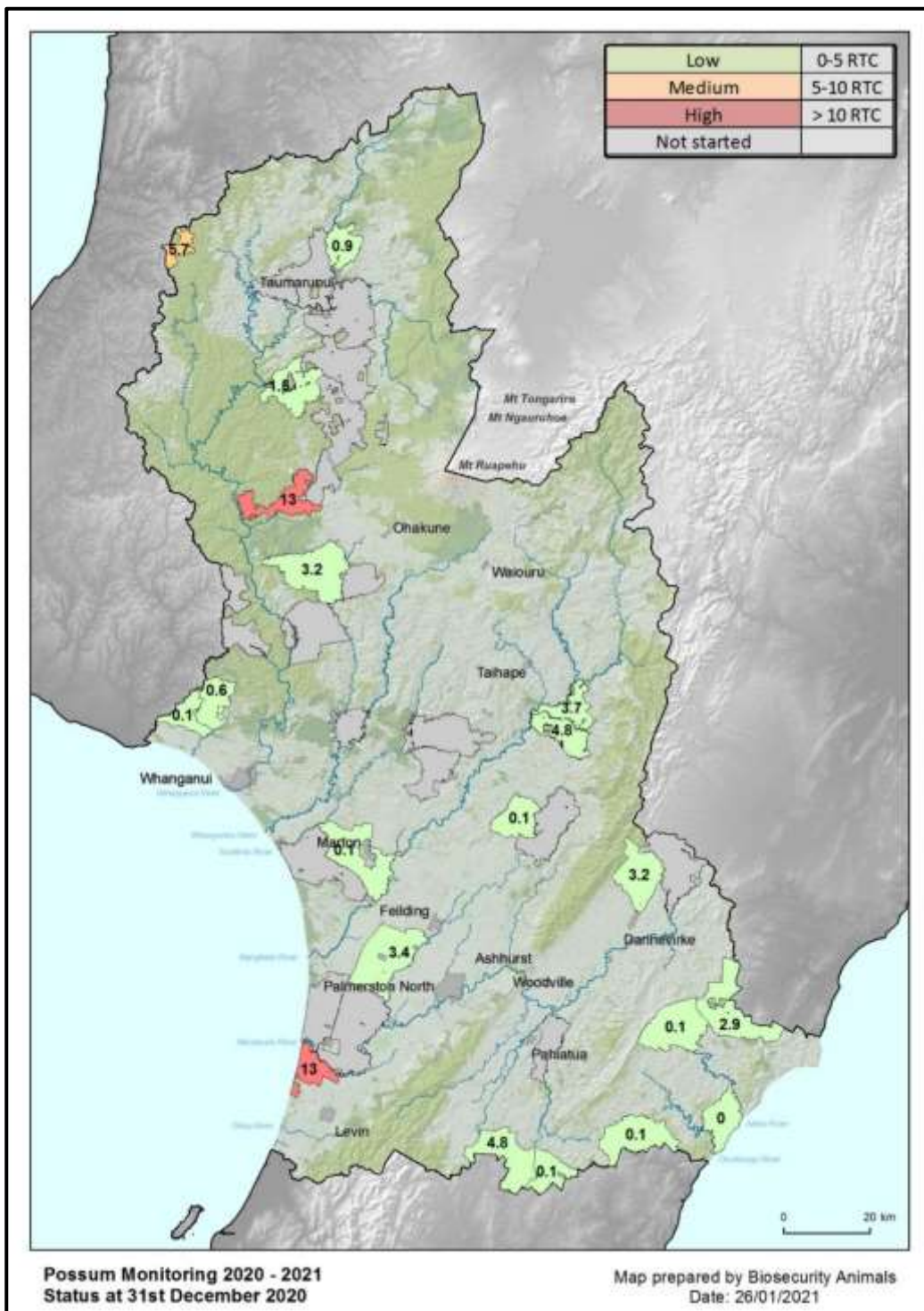
### 4.2 Activity Update

- 4.2.1 A further eight of the programmed 38 PCO monitors were completed during the reporting period (Map 3) with the RTC results ranging from 0.1% to 13.0% RTC. The average result over the eight monitors was 3.1%  $\pm$ 1.1%. Please refer to Table 4 for the full list of PCOs monitored during the reporting period; it also shows the list of further PCOs to be monitored this financial year.
- 4.2.2 The Ruatiti Stage Two PCO (a new ex-OSPRI job) returned a 13% RTC result, which was higher than was anticipated. We plan to undertake a second fill of the stations in areas where the monitor line data identified high populations, before the end of this year.

Table 3 Monitors completed to end of December 2020

<b>PCO</b>	<b>RTC %</b>	<b>CI + %</b>	<b>Completed</b>	<b>Rank</b>
Waitarere	13	3.2	Aug-20	1
Ruatiti Stage One	13	2.3	Oct-20	2
Waitaanga	5.7	1.8	Sep-20	3
Eketahuna South	4.8	3.2	Aug-20	4
Kawhatau	4.8	1.2	Aug-20	5
Toe Toe	3.7	1.5	Dec-20	6
Rongotea	3.4	2.6	Jul-20	7
Matamau West	3.2	1.5	Jul-20	8
Raetihi Buffer Two	3.2	2	Nov-20	9
Weber	2.9	1.8	Nov-20	10
Whakahoro	1.5	1.2	Nov-20	11
Taringamotu	0.9	1.2	Sep-20	12
Kai Iwi	0.6	0.4	Sep-20	13
East Alfredton	0.1	0.1	Jul-20	14
Waihoki	0.1	0.1	Jul-20	15
Oporae East	0.1	0.1	Aug-20	16
Maxwell	0.1	0.1	Oct-20	17
Marton	0.1	0.1	Oct-20	18
Kimbolton	0.1	0.1	Nov-20	19
Branscombe Coast	0	0	Jul-20	20
Average	3.1	1.2		





Map 3 Status of Possum Monitoring

Table 4 Other PCOs scheduled to be monitored in 2020-21

<b>PCO's To be Monitored 2020-21</b>
Ahu Ahu
Apiti
Coastal Foxton
Coastal Turakina
Hikamutu
Huntermville
Kaitieke
Makino North
Mangaporau
Matahiwi
Otairi
Pipipi
Raetihi Buffer 1
Retaruke
Taumarunui Rollback
East Pahiatua
Norsewood
Himatangi

- 4.2.3 The procurement process to select the contractors for the next three years of PCO monitoring commenced in December 2020. As with the possum control procurement process, the registration of interest document for monitoring was set to be posted on Tenderlink in early February. We aim to have the procurement completed by the end of April.

## 5 ROOK CONTROL PROGRAMME

### 5.1 Programme overview

- 5.1.1 Rooks are categorised as an eradication species in Horizons' **Regional Pest Management Programme** (RPMP) 2017-37 and the region is surveyed annually for active rookeries. A contractor is engaged to aurally poison nests to control both chicks and adult rooks.

## 5.2 Activity update

5.2.1 Following surveys, aerial control was undertaken in October with a second round of flights to check active nests carried out in November. All active nests were treated with a contact toxin by an operator slung below helicopter.

5.2.2 A total of 136 sites were visited over the region with 56 active rookeries revisited in the second round of flights.

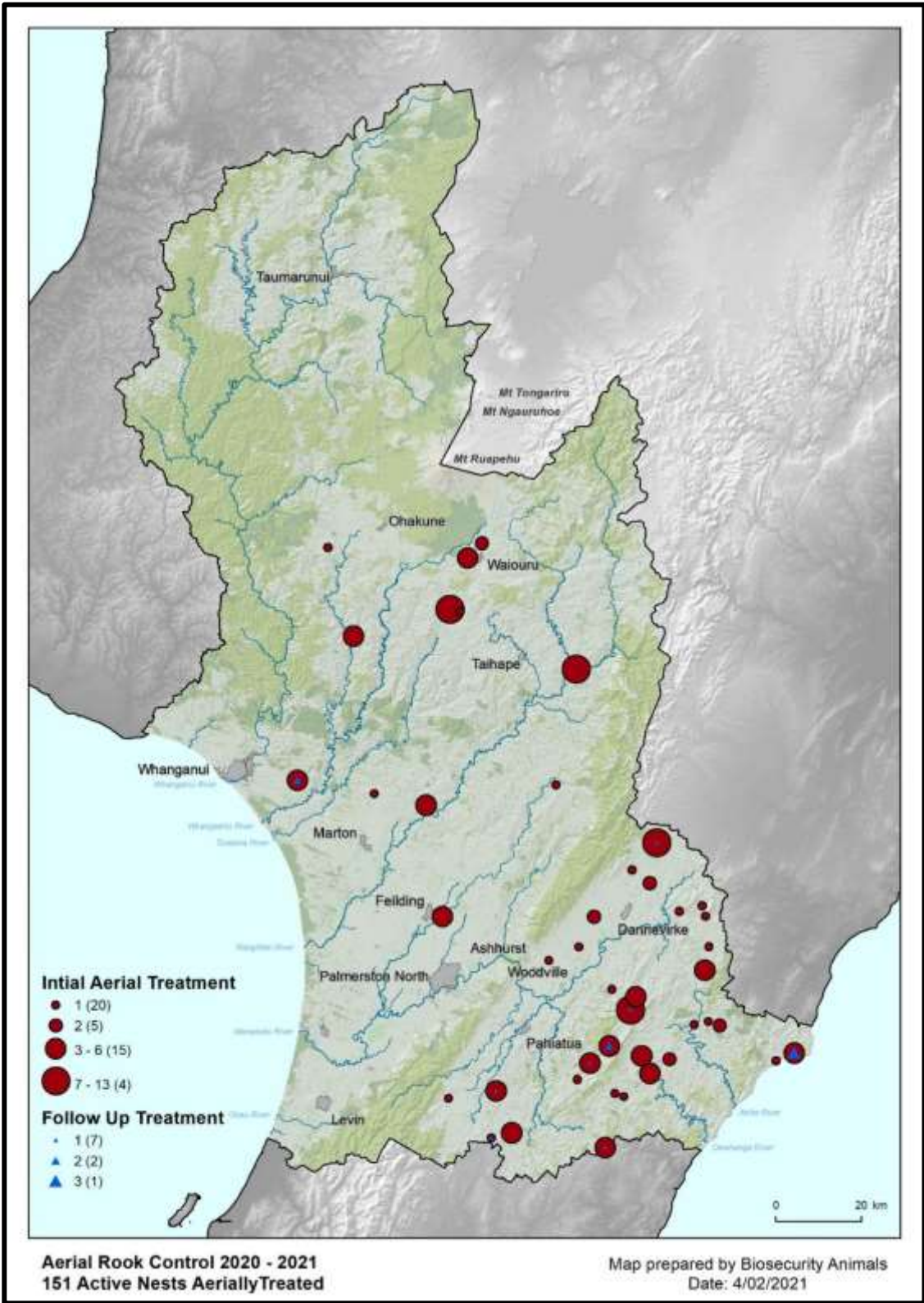
5.2.3 There was an increase in active nests treated this year with 152 active nests spread over 45 active rookeries (Map 4 below) compared to 94 active nests spread over 56 active rookeries in 2019.

5.2.4 Four historically inactive rookeries were found to be active again with three having active nests. A total of 18 nests were treated.

Nineteen new rookeries were reported by the public and followed up on. Fourteen had active nests with a total of 51 active nests treated.

5.2.5 As part of the Annual Plan process, additional budget has been provided for a second check of rookeries. The rechecks were completed approximately 3-4 weeks later with a total of 56 rookeries inspected and 14 treated.

5.2.6 There was a large increase of active nests treated this season, due primarily to the increase in rookeries reported by the public, which contributed 51 active nests to the total. Of the total of 152 active nests, 76 of those treated were in either new rookeries, historic rookeries or were picked up during the second flight. This highlights the importance of public awareness, timely prompts through social media platforms for surveillance information and the checking done in the second flight.



Map 4 Previous year's control work.

## 6 AMENITY PEST PROGRAMME

### 6.1 Programme overview

6.1.1 The amenity pest programme provides a pest animal advisory service for ratepayers with pest animal issues. Horizons provides advice and in some cases loans traps and supplies bait to enable landowners to undertake their own control. Enquiries are responded to within two working days of being lodged and usually involve pests such as possums, rabbits, mustelids, rats, and magpies.

### 6.2 Activity update

6.2.1 The amenity pest programme received 311 enquiries during the reporting period with the greatest number related to rabbits, followed by possums and mustelids (ferrets, stoats and weasels).

6.2.2 All enquiries were responded to within the agreed timeframes.

6.2.3 Horizons staff are assisting a group consisting of farmers, Pukaha Mt Bruce Wildlife Centre and Greater Wellington Regional Council with advice on rabbit control in the area surrounding the Wildlife Centre. The area has had issues with rabbits in the past and the group are investigating how, with a collaborative approach, they can achieve the most effective control. Horizons already provides a predator trapping service on this land.

## 7 REGIONAL PEST MANAGEMENT PLAN (RPMP)

### 7.1 Programme overview

#### **RABBITS**

7.1.1 Three years of very mild winters have spared rabbits the normal winter mortality populations experience, which can be in the order of 95%. This significantly reduces the base breeding populations going into spring and maintains the overall rabbit populations at a manageable level, but our recent mild winters have significantly increased peak populations.

7.1.2 Horizons has been receiving reports of significant rabbit populations, particularly in drier parts of the region, and indications are we can expect another favourable breeding season this year. The Horizons Regional Pest Management Plan 2017-37 (RPMP) considered adding rabbits into the RPMP, however the analysis at the time

showed that the costs outweighed the benefits for ratepayers. Consequently rabbits were not included in the plan to receive rate-funded control or management, and are considered landowners' responsibility.

- 7.1.3 We currently provide advice to landowners on the management and control of rabbits, along with a tri-annual survey for rabbit calicivirus (also known as Rabbit Haemorrhagic Disease Virus (RHDV)), and a population monitor to track movement in rabbit abundance across the region. The virus survey is about to be undertaken, and the population monitor will be completed in May 2021. The virus survey will give information about the level of immunity to the virus held in the rabbit population, and will provide guidance on the likely mortality rate if it is released into the local rabbit population. When we have the results from this survey we will evaluate options and report back to Council.

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