

## BIOSECURITY ANIMALS ACTIVITY

### 1 Overview

- 1.1.1 This report is to update Council on progress of the programmes giving effect to the Biosecurity Animals Operational Plan for the period 1 April 2019 to 30 June 2019, and summarising the activity for 2018-19. The report is presented in four sections (Possum Control, Possum monitoring, Rook Control, and Amenity Pest Management).
- 1.1.2 Over the 2018-19 year all four of the Annual Plan targets were met (Table 1) including completing over 184,000 hectares of possum control in new areas for the programme, 36% more than the Annual Plan target and maintaining possum densities at an average of approximately 3.3% for a target of 10%.

Table 1 The Long-term Plan targets, and progress against them.

Long-term Plan Target	Target	Progress to date		Result 2018-19
Pest Animal Management				
Possum densities are maintained at/below 10% <b>residual trap catch</b> (RTC) in all existing/new possum control operations. This is to enhance production, biodiversity, disease protection and amenity values.	<10%	Maintenance PCOs 3.6% RTC Initial PCO pre & post control 3.3%RTC		Achieved
Additional hectares included in the <b>Possum Control Operation</b> (PCO) programme.	135,668 ha	184,555 ha allocated	184,555 ha completed	136% of target
All known rookeries are treated annually to reduce crop losses and damage.		Aerial control operation completed One ground-based operation complete		Completed
Provide an urban/peri-urban animal pest management service to assist urban ratepayers with specialist advice and equipment; animal pest control assistance/enquiries responded to within two working days.	100%	837 enquires, 100% met within timeframe.		Completed

- 1.1.3 Activity during the reporting period involved ongoing possum control in the **Regional Response Team's** (RRT's) **Possum Control Operations** (PCOs) and commencement of the external contractors' PCO contracts. The possum monitoring work has also commenced in the ex-Ospri and maintenance PCOs. The amenity pest programme resulted in 145 enquiries and all were replied to within the Long-term Plan target timeframe of two working days.

## 2 Possums

### 1.2 Activity Overview

- 1.2.1 In 2018-19 95 PCO areas were planned to receive control, including the 16 new ex-OSPRI PCO areas added to the programme (Map 1). Seventy-nine of the 120 maintenance PCO areas that were part of the programme the previous year were to receive ongoing maintenance work. Forty-one of the 120 maintenance operations 'deferred' from control. Total possum control activities in 2018-19 cover 1,292,519 hectares, an increase of 184,555 hectares on previous year. Progress against the Long-term Plan targets is presented in the section above.
- 1.2.2 The 2018-19 Operational Plan split operational work for the Horizons RRT and external service providers as follows (Map 2).
- Internal team delivery of 60 PCO areas, 56 maintenance PCO areas and four new ex-OSPRI PCO areas.
  - External contractors will deliver 35 PCO areas, 23 maintenance PCO areas and 12 new ex-OSPRI PCO areas.

### 1.3 Year to date progress

Table 2 Progress reporting for the Possum Control Programme against Operational Plan targets.

Measure	Progress to Date	This Period	Operational Plan Target	% Completed
<b>Regional Response Team</b>				
PCOs completed <sup>1,3</sup>	56	19	61	91%
New hectares completed <sup>2,3</sup>	47,538	10,105	55,608	85%
<b>External Contractors</b>				
PCOs completed <sup>1</sup>	33	16	35	94%
New hectares completed <sup>2</sup>	128,947	31,668	128,947	100%
<b>Combined PCO</b>				
PCOs completed <sup>1</sup>	89	35	95	93%
New hectares completed <sup>2</sup>	184,555	41,773	184,555	100%

<sup>1</sup> New and Maintenance PCOs

<sup>2</sup> New (Ex-OSPRI) PCOs

<sup>3</sup> Includes Papiti Stage 2

- 1.3.1 Overall during 2018-19 all Annual Plan targets were met with 1,292,519 ha of operational control delivered including 184,555 ha of new areas (136% of target, 135,668 ha). The operational plan targeted 1,283,283 ha of control over 95 PCOs, and in total 917,716 ha of control was delivered over 89 completed PCOs, and 5 started PCOs. The operational plan targeted 118,671 bait station fills and 111,709 (94%) of these were completed. The year end result reflects the difficulty in sourcing services for contracts which required some reshuffling of operational delivery. At the end of the year one PCO was not started, and some unexpected extra resources required to bring some PCO infrastructure up to standard to meet new standard specification for bait station use.

## 1.4 Activity Highlights

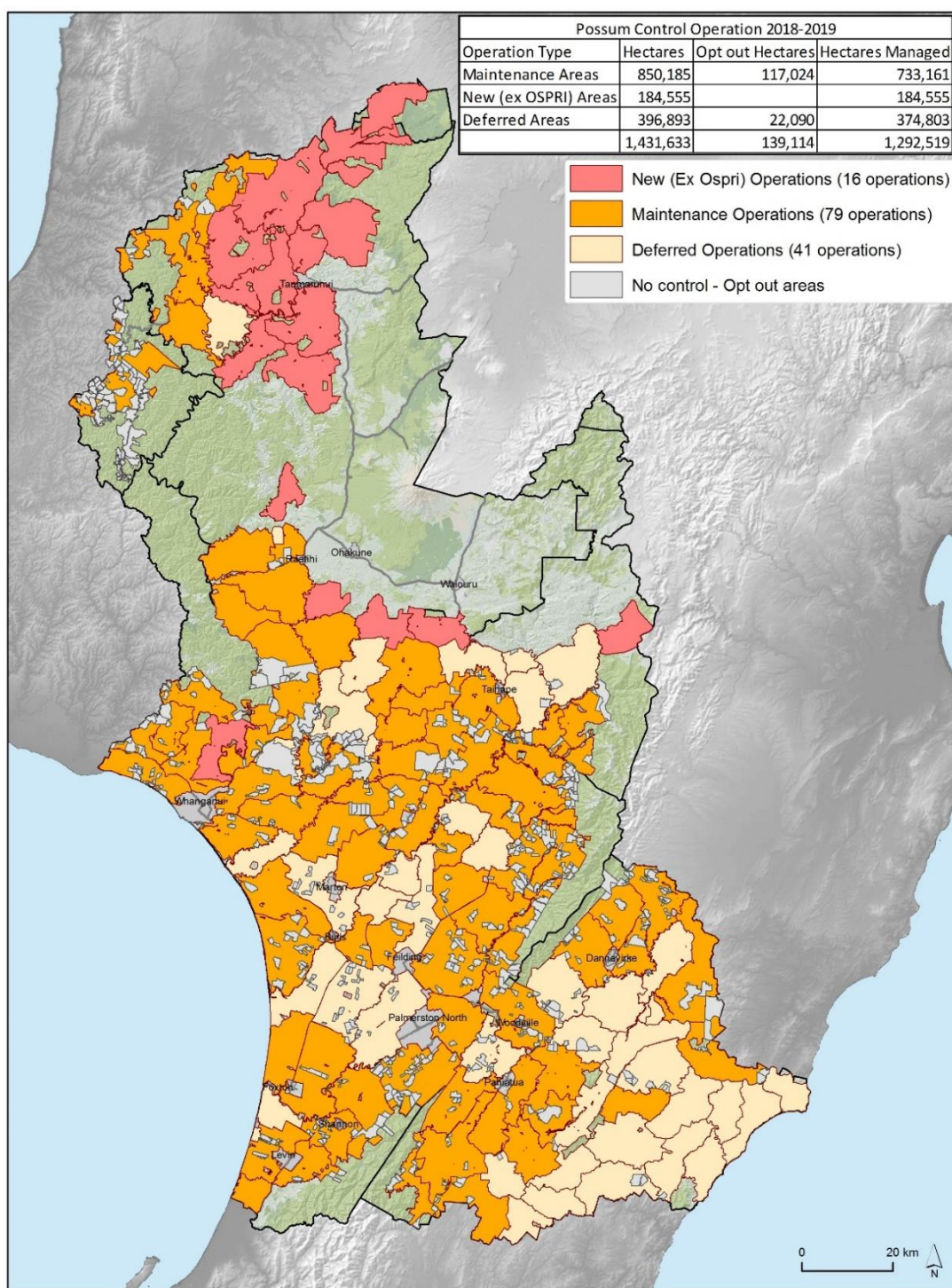
### The Regional Response Team

- 1.4.1 The current status of PCOs (Map 3) highlights the operational work:
- 56 PCOs have been completed;
  - 3 PCOs have been started;
  - 1 PCO was not started; and
  - 64,680 bait stations have been filled of the 70,671 programmed (94%).
- 1.4.2 The RRT started a an ex-OSPRI PCO set Papaiti Stage 2 which originally was planned to be done by contractors. Toe Toe and Moka PCOs originally planned for the Taihape RRT were done by contractors. Papaiti Stage 2 was started with one small isolated property completed.
- 1.4.3 The RRT finished with a 94% completion of the planned work. Two PCO areas required additional time than planned as a significant number of new bait stations were installed to improve the bait station coverage. These areas had previously been worked by contractors and required additional infrastructure to meet the new specifications for bait station setup eg. How each bait station is set and where they are set in relation to each other and possum habitat.
- 1.4.4 The PCO data management project is making good progress, a meeting was held with Greater Wellington Regional Council who were happy to share information around their pest animal data system.

### External

- 1.4.5 The current status of PCOs (Map 3) highlights the operational work:
- 33 PCOs have been completed;
  - 2 PCOs have been started;
  - 47,029 bait stations have been filled of the 48,000 programmed (98%).
- 1.4.6 Work is underway in the uncompleted operations and it is anticipated that they will be finished in early July. Map 3 shows the current status of the operational work.
- 1.4.7 Overall the programme ran very smoothly this year with all of the external contractors meeting their contractual obligations and demonstrating ability to take on extra work as required.

- 1.4.8 Staff will meet with the contractors individually in mid July to discuss the operational work in the 2018-19 programme and also to go over the tentative 2019-20 programme. The full years programme will not be confirmed until the last of the pre control monitors in the ex OSPRI areas have been completed. All going to plan this should be in early August.

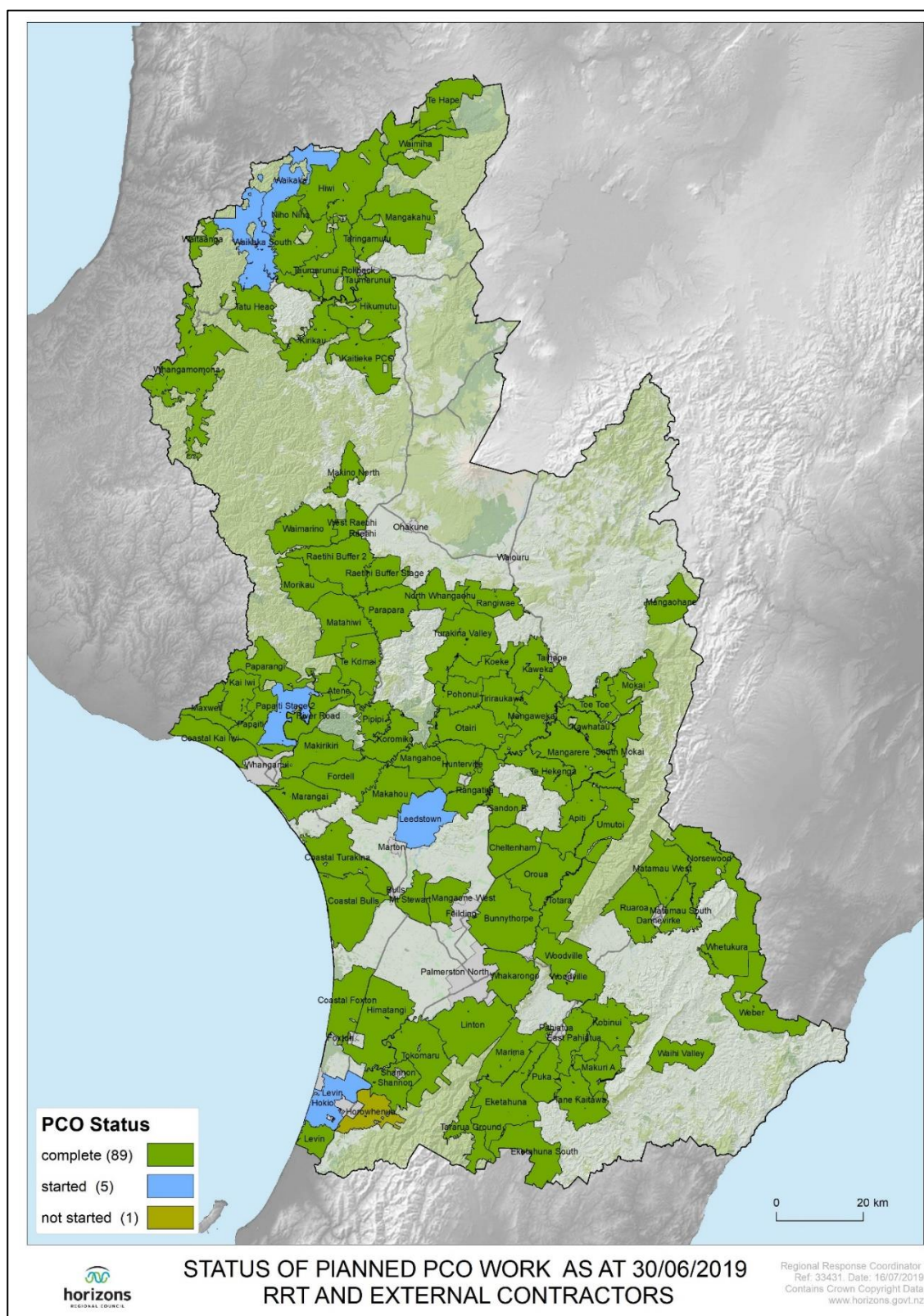


**Possum Control Operation 2018-2019**  
**Total Area: 1,431,633 Hectares**  
**Total Area to be managed: 1,292,519 Hectares**

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Map 1 Possum Control Operation 2018-19 as planned in the Operational Plan.





Map 2 Status of current Possum Control Operations (RRT and External Contractors) as delivered (at 30 June 2019).

## 2 Possum Monitoring

### 2.1 Activity Overview

- 2.1.1 In the 2018-19 year all monitoring work was targeted to the possum control operations, with no monitoring of rabbits undertaken. Consistent with the upgraded possum monitoring programme, monitors were scheduled to be undertaken in 31 of the existing 120 maintenance PCO's and also in five of the ex OSPRI operations that were added to the PCO. In these areas pre control and post control monitors were undertaken. Two of the ex OSPRI areas returned very low pre control results, as a consequence of this we made a change to the programme by bringing a further two maintenance operations into the monitoring programme instead of post monitoring the two ex OSPRI jobs that had the low results.
- 2.1.2 Following the low pre-control monitoring results in the ex-OSPRI area, a decision was made to pre control monitor the ex OSPRI areas that are available for inclusion into the PCO in the 2019-20 year. In total, 51 PCOs were planned to be monitored, 45 by external contractors and the balance by the Regional Response Team. Note: the RRT only monitor work completed by external contractors.
- 2.1.3 The monitoring plan was for the PCOs was for 25 wax-tag lines to be set up, providing there is enough possum habitat to do so, with the line positions being randomly selected. Each line to have 10 wax tags out in the field for seven nights.
- 2.1.4 The post control monitoring contributes to reporting against the Long-term Plan Target for possum densities in the possum control programme to be less than 10% Residual Trap Catch (as shown in previous sections). Reporting against the Operational Plan targets is shown in Table 3 below. The pre-control monitoring contributes to decisions on whether to carry out control in PCOs. Where pre and post control monitoring occurs, this informs the PosSim model that underpins the programme.

### 1.3 Year-to-date progress

Table 3 Progress reporting for the PCO monitoring programme in the 2018-19 year.

Measure	Reporting Period					YTD Average	Op Plan Target	%
	1st	2nd	3rd	4th	5th			
Number of Maintenance PCO monitors completed	0	0	11	3	9	23	33	70%
<u>Possum densities</u> Maintenance PCOs Residual Trap Catch (RTC) result	0	0	1.5%	4.8%	4.6%	3.6 %	<10% RTC	
Number of 2018-19 Pre-/Post-PCO monitors completed	0	3	2	1	1	7	8	88%
<u>Possum densities:</u> Pre-/Post-control PCOs Residual Trap Catch (RTC) result	0	3.4%	3.3%	2.9%	14.9%	3.3%	<10% RTC	
Number of 2019-20 Pre-/Post-PCO monitors completed	0	0	0	0	7	7	13	54%
<u>Possum densities:</u> Pre-/Post-control PCOs Residual Trap Catch (RTC) result	0	0	0	0	1.9%	1.9%	<10% RTC	

## 2.2 Activity Highlights

- 2.2.1 The procurement process for the monitoring work (2018-21) was completed in October 2018, with the contract documentation signed in November between Horizons Regional Council and Darrin Spillane Ltd.
- 2.2.2 Nine maintenance operations were monitored during the reporting period with results ranging from 0.4% to 12.1% RTC. The average result was 4.6% RTC (see Table 4). The Umutoi PCO returned a result over the 10% target. The operational inputs for this years control will be reviewed with the contractor undertaking the work and amended as required.

Table 4 PCO maintenance monitoring completed during the reporting period.

PCO	RTC Result
Kohinui	2.6%
Linton	0.9%
Makirikiri	0.4%
Pohonui	4.3%
Tararua Ground	7.6%
Te Komai	6.0%
Turakina Valley	6.2%
Umutoi	12.1%
Whetukura	0.9%

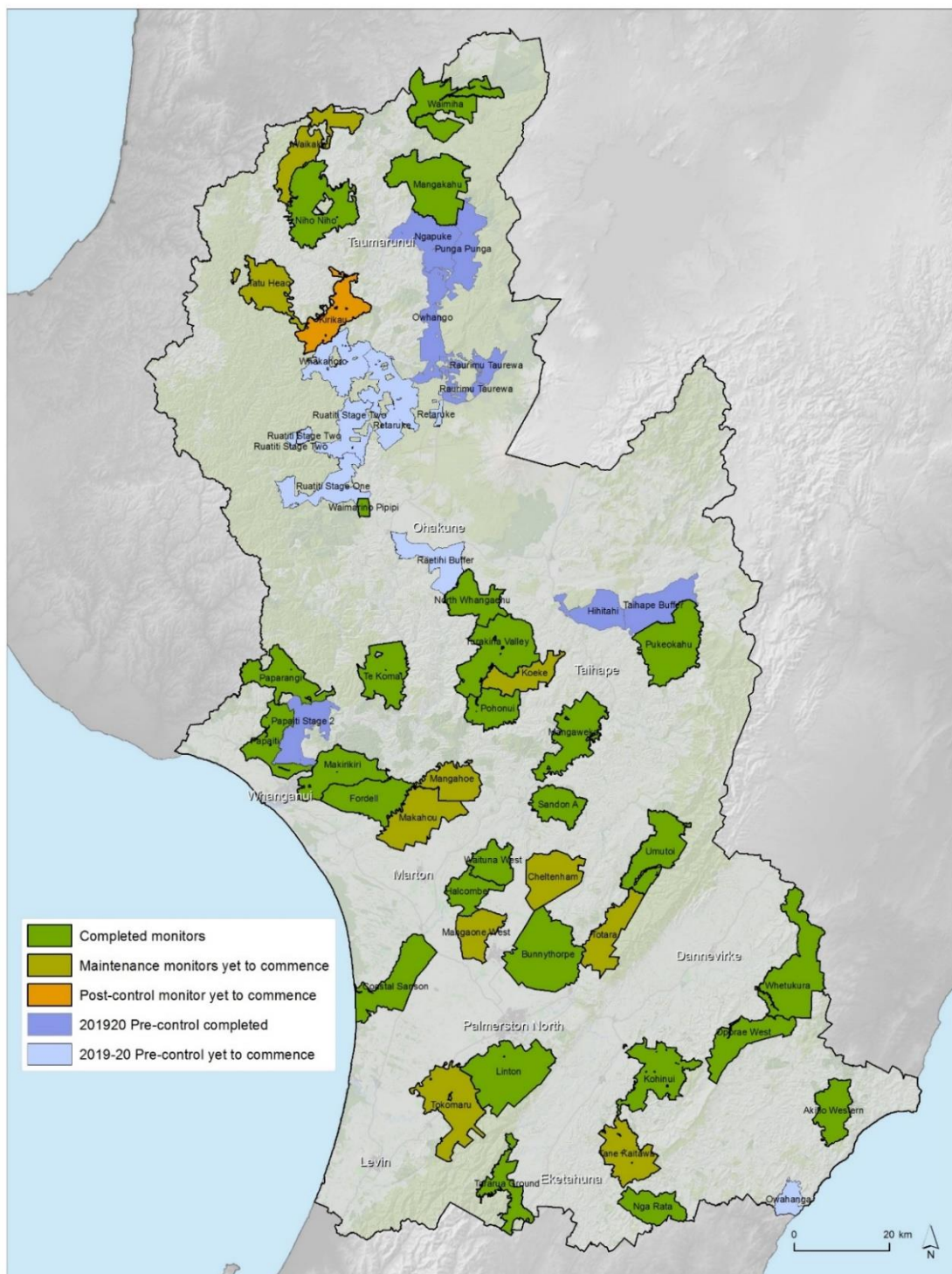
- 2.2.3 The second of the post-control monitors (Niho Niho) was completed during the reporting period. The result of 14.9% RTC indicates that the possum populations increased post control. Control coverage vs monitoring lines locations were assessed to be well matched. The explanation for the increase is unknown, however the pre control monitor did take place during the willow bud and pine pollen season when possums are very hard to divert from feeding on these species and to have them interact with monitoring devices is difficult. This could cause the monitoring result to under estimate the population. The post control monitor was undertaken some months later and the result can be viewed with confidence that it reasonably reflects the post control possum abundance. As a result of these monitoring results Horizons will review the timing of pre-control monitoring to reduce the potential impact of seasonality on interpretation of results.
- 2.2.4 The Niho Niho PCO will be worked in 2019-20 year and discussions will be held with the contractor that works the area to develop a revised work plan for the coming year.



Table 5 Combined ex-OSPRI monitors – pre-Control.

PCO Pre-control Monitors	RTC Results	Post-control Results
Mangakahu (will not post-control monitor)	0.1%	
North Whangaehu (will not post-control monitor)	0.9%	
Kirikau	2.3%	
Waimiha	5.7%	2.9%
Niho Niho	7.9%	14.9%

- 2.2.5 As can be seen in Table 3 there are a number of monitors that didn't get completed by the end of the year. The reason for this is that our service provider had difficulty resourcing the required number of qualified staff to undertake the work. As part of the ongoing procurement process we plan to meet with the contractor in the near future to discuss the matter and develop processes to ensure that this situation doesn't occur again.
- 2.2.6 The monitors that didn't get completed by the end of the year will be added to the 2019-20 monitoring programme.



PCO MONITORING AS AT 30/06/2019

Map 3 Status of current Possum Control Operation Monitoring as at 30 June 2019

## 3 Rooks

### 3.1 Activity Overview

- 3.1.1 This report summarises the operational and management work involved in the 2018-19 regional rook programme. A more detailed overview of the programme is provided in the Biosecurity Animals Operational Plan 2018-19.
- 3.1.2 The Long-term Plan target for rook control is to treat all known rookeries annually to reduce crop losses and damage. This annual plan target was met in 2018-19. Reporting against this target and operational plan targets is shown in Table 6.

### 3.2 Year-to-date progress

Table 6 Progress reporting for the rook programme Operational Plan target in the 2018-19 year.

Measure	Reporting Period				Total	Operational Plan Target	Completed %
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>			
Existing rook colonies (rookeries) (a)	0	72	0	0	72	Record	100
New rookeries (b)	0	6	0	0	6	Record	100
Total rook colonies (rookeries) (a + b)	0	78	0	0	78	Record	100
All known rookeries are treated annually to reduce crop losses and damage	0	78	0	0	78	100%	100
Ground poisoning operations	0	1	0	0	1	Control attempted	100
Report ground control efficacy (% estimated kill)	0	0	0	0	0	Record	0
Breeding rookery database updated by January 2019	0	Yes	0	0	Yes	Record	100

### 3.3 Activity Highlights

- 3.3.1 A report of a large number rooks on freshly cultivated paddocks near Taihape was followed up but because they did not take pre-feed and then dispersing, no poisoning was attempted.
- The aerial and ground control portion of the rook programme was delivered in October (Map 4 and

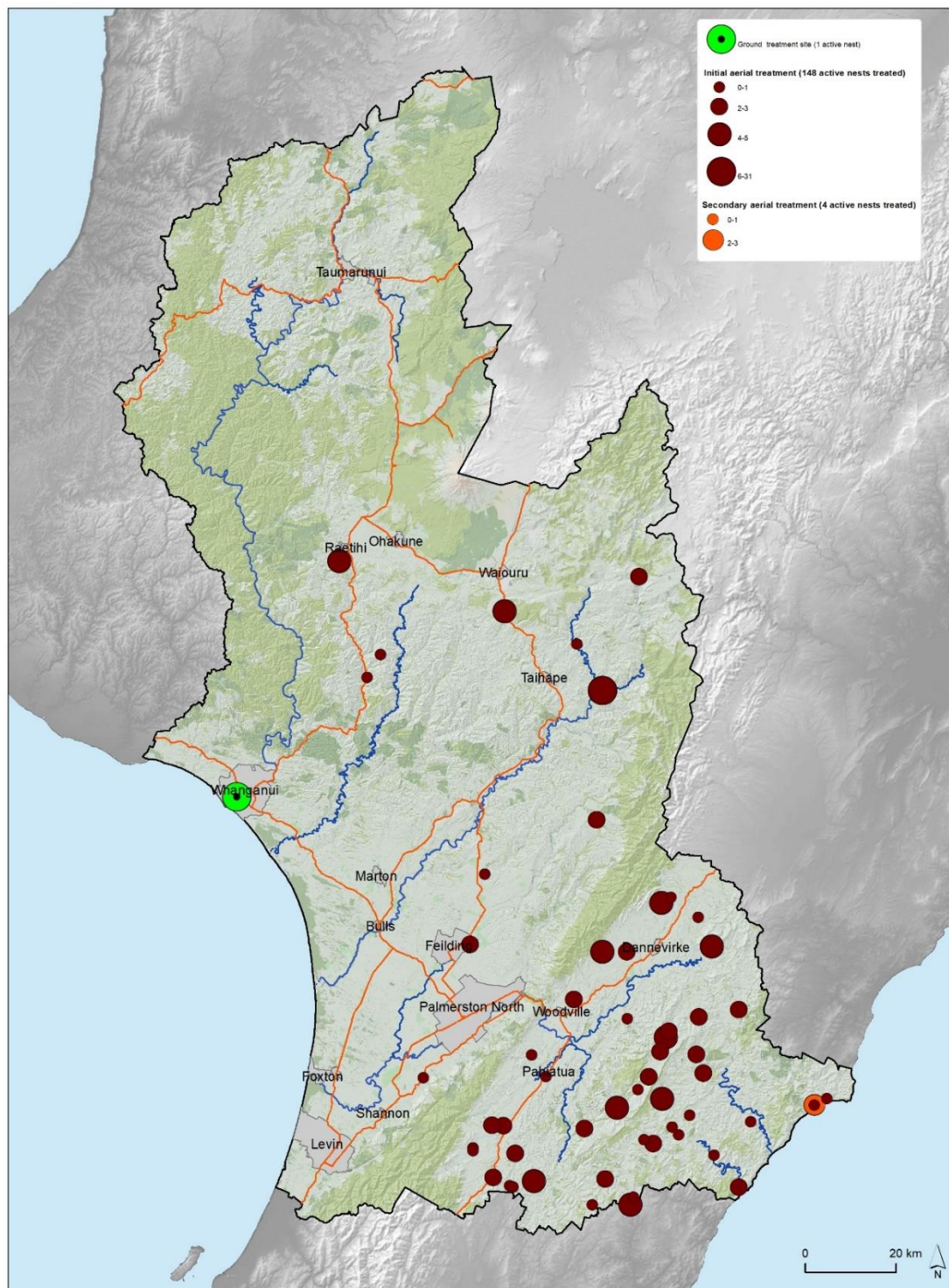
3.3.2 Table 7).

- 678 nests were treated, with 152 found to be active in that they contained eggs or chicks.
- A single large rookery at Otupae has impacted significantly on the programme's statistics with 31 active nests treated at the site.
- One rookery within the Whanganui City boundary was inspected by an arborist, and one nest that was found to be active was treated.

Table 7 Aerial rook programme trends.

AERIAL ROOK CONTROL				
AREA	ACTIVE NESTS TREATED			
	2015-16	2016-17	2017-18	2018-19
Taumaranui	0	0	0	0
Tararua	127	117	100	98
Manawatū	33	4	3	8
Taihape	28	20	32	46
<b>TOTAL</b>	<b>188</b>	<b>141</b>	<b>135</b>	<b>152</b>





**ROOK CONTROL 2018-19**  
**Aerial Treatment Sites, Active Nests Treated 152**  
**Ground Treatment Sites, Active Nests Treated 1**

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Map 4 Aerial and ground-based rook control for 2018-19.

## 4 Amenity Pests

### 4.1 Activity Overview

- 4.1.1 Horizons receive a large number of enquiries relating to pest animal issues from landowners across the Region. Most relate to 'nuisance' animals including possums, mustelids and rabbits etc in 'amenity'-type situations, e.g., around lifestyle blocks, gardens etc. In these situations, Horizons' animal pest management staff provide advice on control techniques and supply loan traps, and in some cases toxins, to affected landowners.
- 4.1.2 We also receive complaints about pests, mainly rabbits, spreading from neighbours' properties and causing problems. In these situations, ground inspections and discussions with affected landowners are required and if the problem is unable to be resolved enforcement options can be used.
- 4.1.3 The Long-term Plan target is for Horizons to provide a urban/peri-urban animal pest management service to assist urban ratepayers with specialist advice and equipment, and that 100% of animal pest control assistance/enquiries are responded to within two working days.

### 4.2 Year-to-date progress

Table 8 Progress reporting for the amenity pest management programme in the 2018-19 year.

Measure	Reporting Period					YTD Actual	Op Plan Target	%
	1st	2nd	3rd	4th	5th			
Number of enquiries received	117	164	218	145	193	837	837	Achieved
Percentage responded to within two working days	100%	100%	100%	100%	100%	100%	100%	Achieved

### 4.3 Activity Highlights

- 4.3.1 A total of 193 enquiries were received during the reporting period. Figures 1 and 2 provide further information on the type of pest the enquiry related to as well as the spread of enquiries across the districts of the Region. Possums and rabbits were the predominant pest type prompting enquiries during the reporting period and the largest number of enquiries was in the Manawatū and Whanganui areas.
- 4.3.2 All landowners making enquiries were contacted and/or visited within the prescribed timeframes and provided with advice and equipment, such as traps or small amounts of toxins, to help them deal with their pest issues.
- 4.3.3 The 'All other' section comprised enquiries relating to rodents (4), pigeons (4), wasps (3), feral , peafowl (2), geese (1) and general enquiries (6).

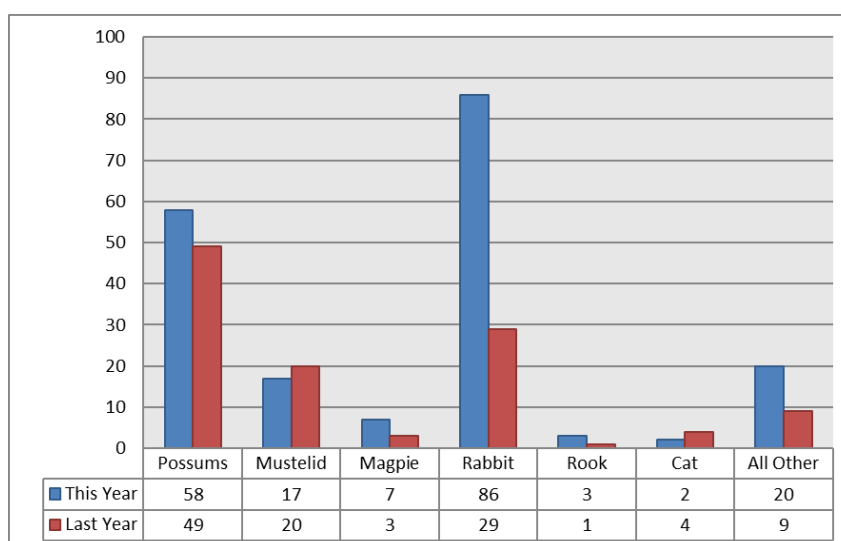


Figure 1 Pest Animal Enquiry Summary – by Pest Type – 1 April to 30 June 2019.

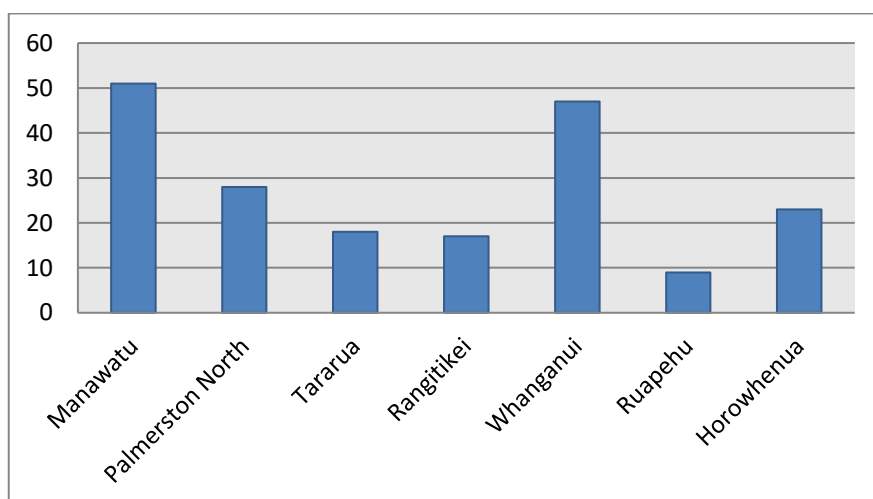


Figure 2 Pest Animal Enquiry Summary by District - 1 April 2019 to 30 June 2019.

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