

## Hawke's Bay Regional Possum Control Technical Protocol (PN 4969)

This Regional Possum Control Protocol sets out areas that are **Possum Control Areas** and **Possum Eradication Areas** and the requirements to meet the programme rules in the Hawke's Bay Regional Pest Management Plan 2018 -2038. These rules apply to all Possum Control Areas and Possum Eradication Areas as identified in this document.

### Possum description

The Australian Brushtail Possum is a nocturnal marsupial introduced and liberated in New Zealand by private individuals and acclimatisation societies between 1837 and 1898 to establish a fur trade. Possums were accorded various levels of protection until 1947. When it became clear that the environmental damage inflicted by them far outweighed any profit made from their skins, this protection was lifted.

Possums in New Zealand occur as two colour types, "blacks" and "greys". Adult male blacks vary from rich red-brown to brown, the females have a darker or black-brown fur. Adult male greys are often strongly rufous in the neck and shoulders while the greys often have a distinct silver tinge in the fur.

Size and weight are dependent on habitat. In good conditions adult possums can weigh between 3 to 5 kilograms. Their life span is about nine years. Possums reach reproductive maturity at approximately two years of age. Usually females rear three young every two years.

Possums can be found throughout Hawke's Bay. Their favoured are generally found in bush/pasture margins as these provide a plentiful supply of food and suitable habitat.

### Adverse effects

Possums are considered the major animal pest in New Zealand. In farming areas, they spread bovine tuberculosis to beef and dairy cattle, and to farmed deer, damage crops and orchards, kill poplars and willows planted to control hill-country erosion and stabilise riverbanks, and eat pasture. In exotic forest plantations they kill young trees and stunt the growth of older trees by ring-barking them or breaking the uppermost branches. In native vegetated areas, possums cause severe damage by altering habitats important to native animals and birds. Tree species that are palatable to possums (e.g. rata, kamahi, and pohutukawa) become much reduced or locally extinct, and are replaced by plants that are less palatable such as tree ferns and pepperwood. As well as altering the composition of native forests and competing with native fauna, possums also prey directly on native insects and birds.

## Possum Control Area

### Purpose

Hawkes Bay Regional Council has been controlling possums through its Possum Control Area (PCA) programme since 2000. There has been a very high level of support for the PCA programme, and a strong belief by most land occupiers within the programme that it is providing value for money for programme participants. The programme has grown to over 700,000ha and is exceeding its target with an average residual trap catch (RTC) of 2.3% across all PCA programmes. This success and landowner support has provided the foundation for further strengthening PCA benefits.

### Process

A Possum Control Area is defined as an area identified as a Possum Control Area within this Protocol. All Possum Control Areas will be mapped and identified in this Protocol (*Figure 1*).

If the Council amends this Protocol to include an additional map, the map will have legal effect as part of the Hawke's Bay Regional Pest Management Plan 2018 – 2038 once notice has been given to affected land occupiers and in the NZ Gazette that this Protocol has been amended. Occupiers within that mapped area will be required to comply with the requirements within this Technical Protocol from the date specified in the letter to land occupiers and the Gazette notice.

This Technical Protocol is incorporated by reference into the Hawke's Bay Regional Pest Management Plan 2018 – 2038 (Appendix 1). If technical requirements in the Protocol are updated, occupiers of land within a Possum Control Area are required to maintain pests in accordance with the amended Protocol from the date specified in the Gazette notice. There is no further requirement for the Council to re-enter into written agreements with land occupiers to ensure compliance with the amended Protocol.

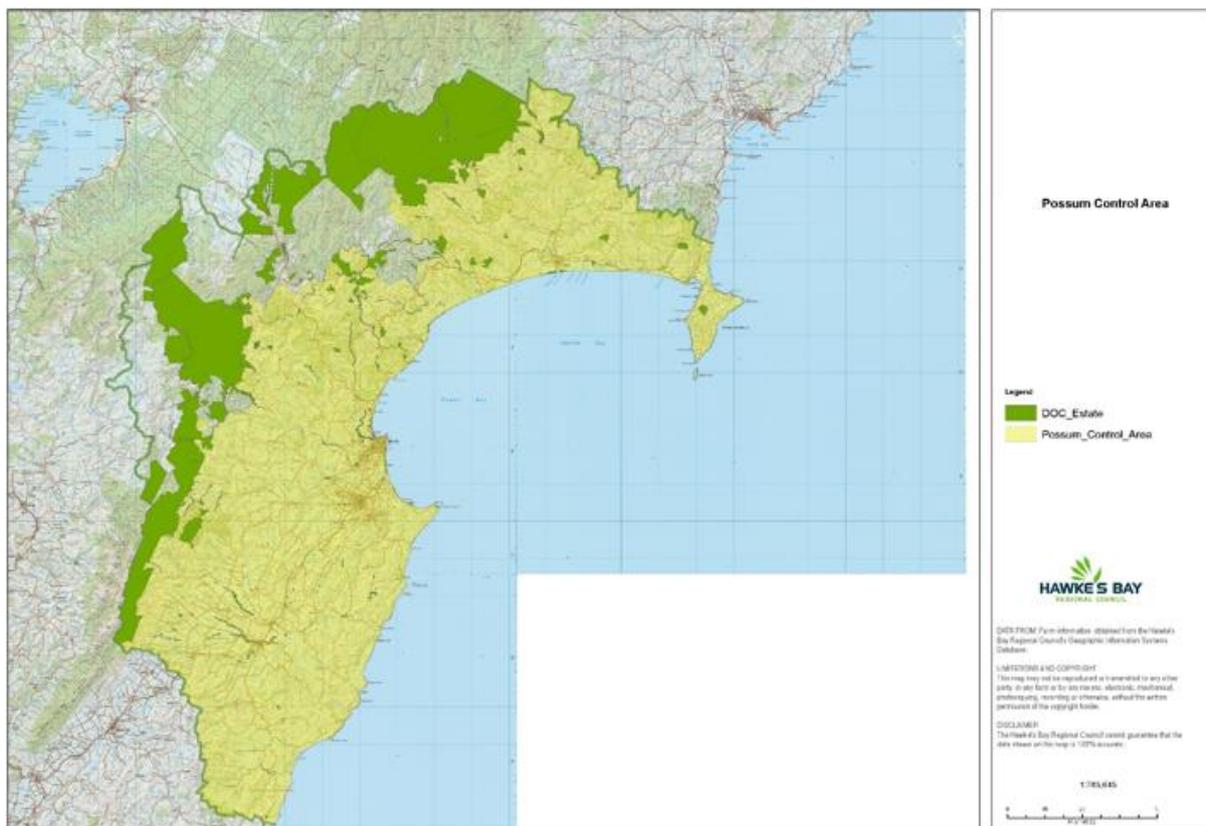


Figure 1: Possum Control Area (yellow)

### Maintenance requirement

An occupier within a Possum Control Area (Figure 1) shall maintain possum densities on their land at or below 4% residual trap catch.

The ongoing maintenance of possums within a Possum Control Area must be undertaken on a regular basis as to keep possum densities at or below 4% residual trap catch. Possum maintenance is the responsibility of the land occupier. To meet this requirement it is recommended that possum control is undertaken annually. Details of the requirements on land occupiers are set out as follows:

- Private land occupiers:** Occupiers of land greater than 4ha in a Possum Control Area will at their own cost be responsible for maintaining Possum densities at or below 4% residual trap catch. They may elect to carry out their own control or engage a contractor to carry out control.
- Council:** HBRC will maintain possum numbers at or below 4% residual trap catch on land that it occupies or manages within a Possum Control Area. (See River margins below).
- Department of Conservation:** HBRC will arrange maintenance control work over DOC land in a Possum Control Area. HBRC will seek to recover the costs associated with the maintenance control work from DOC.
- River margins:** The occupiers of land adjoining a river and in a Possum Control Area will at their own cost be responsible for the ongoing maintenance of the river margin. Where HBRC occupies or manages the land for river protection, it is deemed to be the occupier. The areas of responsibility will be clearly defined prior to initial control work proceeding.
- Multi-ownership land:** Occupiers of multi-ownership land in a Possum Control Area will at their own cost be responsible for maintaining possum densities at or below 4% residual trap catch. They may elect to carry out their own control or engage a contractor to carry out control.
- Production forestry:** Where production forestry land borders other private land that is being included into a Possum Control Area, then a marginal strip no less than 500 metres into the production forestry land will be included into the possum Control Area. The Occupier is required to maintain this marginal strip below a 4% residual trap catch and will meet the cost of this work. Maintaining a marginal strip of 500m at a 4% residual trap catch or less is likely to require control over an area of forest greater than 500m.
- Regional boundaries:** Where a Possum Control Area borders a regional boundary, the occupier of the land in the Possum Control Area is responsible for maintaining possums at or below 4% residual trap catch at their cost.
- Tb Management Area:** This rule will not apply to any occupier who remains within a Tb Management Area where possums are being actively managed by OSPRI (a not-for-profit limited company consisting of two wholly-owned subsidiaries, TBfree New Zealand Ltd and NAIT Ltd.) at or below 4% residual trap catch, in accordance with this protocol.

### ***Covenanted Areas***

HBRC supports land occupiers covenanting areas of ecologically significant land in Hawke's Bay and has in the past carried out possum control over QEII covenanted areas. The regime outlined below continues the support for covenanted areas with Possum Control Areas.

For the purposes of this Plan, and possum control in particular, covenanted areas mean those lands which have a QEII Trust covenant. HBRC may at its discretion provide possum control assistance over the covenanted land, including Nga whenua rahui.

### **Covenanted areas within a Possum Control Area**

#### **Covenanted Area**

Less than 20 hectares: HBRC will make available free possum bait to enable land occupiers to maintain possum densities below 4% trap catch over the covenanted land.

21 hectares to 300ha: HBRC will limit its assistance to the cost of the most cost effective maintenance technique necessary to allow a landowner to meet their Plan Management obligations.

Where a covenantor disagrees with HBRC's opinion of what is the most cost effective maintenance technique, they will be required to meet the additional costs of maintenance

Greater than 300ha: HBRC may at its discretion provide possum control assistance over the covenanted land.

### **Good Neighbour Rule**

Unless an occupier of land has entered into a Written Management Agreement approved by Hawke's Bay Regional Council, an occupier within, or adjacent to, a Possum Control Area, shall, on receipt of a written direction from an Authorised Person maintain possum densities on their land at or below 4% residual trap catch (in accordance with this Protocol) within 500 metres of the adjoining property boundary where the occupier of the adjoining property is also maintaining possum densities on their land at or below 4% residual trap catch (in accordance with this Protocol) in order to protect economic well-being and environmental values.

## Possum Eradication Area

### Purpose

Possums cause significant adverse impacts across a range of values within the Hawke's Bay region and have been the subject of a substantial community investment to minimise these pest impacts over the last two decades. The eradication of possums on farmland will allow these adverse impacts to cease and provide a significant opportunity for the community to shift resources currently applied to possum control towards controlling predator pests such as mustelids, feral cats and rats. Large scale control of these additional predator pests will allow the region to realise a much greater range of economic and environmental benefits while minimising additional costs to the community.

### Process for forming a Possum Eradication Area

A Possum Eradication Area is created once written agreements have been entered into with 75% or more of the total proposed land area. The Council will undertake possum eradication work within the entire Possum Eradication Area. Once possum eradication commences, land occupiers within the area are required to comply with this Protocol.

A Possum Eradication Area is defined as an area identified as a Possum Eradication Area within this Protocol. All Possum Eradication Areas will be mapped and inserted into this Protocol once the 75% land area threshold has been reached and initial control work has been completed within the area.

Once the Council has given notice to affected land occupiers and in the NZ Gazette that this Protocol has been amended to include an additional map, the map will have legal effect as part of the Hawke's Bay Regional Pest Management Plan 2018 - 2038. Therefore occupiers within that mapped area will be required to comply with the requirements within this Technical Protocol from the date specified in the letter to land occupiers and the Gazette notice.

This Technical Protocol is incorporated by reference into the Hawke's Bay Regional Pest Management Plan 2018 – 2038 (Appendix 2). If technical requirements in the Protocol are updated, occupiers of land within a Possum Eradication Area are required to comply with the amended Protocol from the date specified in the Gazette notice. There is no further requirement for the Council to re-enter into written agreements with land occupiers to ensure compliance with the amended Protocol.

### Possum Eradication Areas

- 1) Names and description
- 2) Map of area

### Possum Eradication Area requirements

- 1) No person shall move or allow to be moved any possum to or within a Possum Eradication Area. This includes commercial transport operators moving goods or people to or among Possum Eradication Areas.
- 2) No person within a Possum Eradication Area, as shown on Map two, may move or interfere with any article or substance left at a place by an authorised person in accordance with this technical protocol for the purpose of:
  - a. confirming the presence, former presence, or absence of possums; or
  - b. managing or eradicating any possums;other than in accordance with the direction or under the supervision of an authorised person.

## Appendix 1 – Possum control area programme insert from Hawke’s Bay Regional Pest Management Plan 2018 – 2038

### 6.4.4 Possums

#### **Background**

Hawke’s Bay Regional Council has been controlling possums through its Possum Control Area (PCA) programme since 2000. There has been a very high level of support for the PCA programme, and a strong belief by most land occupiers within the programme that it is providing value for money for programme participants. The programme has grown to over 700,000ha and is exceeding its target with an average residual trap catch (RTC) of 2.3% across all PCA programmes. This success and landowner support has provided the foundation for further strengthening PCA benefits. The proposed PCA area is shown in Figure 9 below.



#### **Description**

The Australian Brushtail Possum is a nocturnal marsupial introduced and liberated in New Zealand by private individuals and acclimatisation societies between 1837 and 1898 to establish a fur trade. Possums were accorded various levels of protection until 1947. When it became clear that the environmental damage inflicted by them far outweighed any profit made from their skins, this protection was lifted.

Possums in New Zealand occur as two colour types, “blacks” and “greys”. Adult male blacks vary from rich red-brown to brown, the females have a darker or black-brown fur. Adult male greys are often strongly rufous in the neck and shoulders while the greys often have a distinct silver tinge in the fur.

Size and weight are dependent on habitat. In good conditions adult possums can weigh between 3 to 5 kilograms. Their life span is about nine years. Possums reach reproductive maturity at approximately two years of age. Usually females rear three young every two years.

Possums can be found throughout Hawke’s Bay. Their favoured are generally found in bush/pasture margins as these provide a plentiful supply of food and suitable habitat.

#### **Adverse effects**

Possums are considered the major animal pest in New Zealand. In farming areas, they spread bovine tuberculosis to beef and dairy cattle, and to farmed deer, damage crops and orchards, kill poplars and willows planted to control hill-country erosion and stabilise riverbanks, and eat pasture. In exotic forest plantations they kill young trees and stunt the growth of older trees by ring-barking them or breaking the uppermost branches. In native vegetated areas, possums cause severe damage by altering habitats important to native animals and birds. Tree species that are palatable to possums (e.g. rata, kamahi, and pohutukawa) become much reduced or locally extinct, and are replaced by plants that are less palatable such as tree ferns and pepperwood. As well as altering the composition of native forests and competing with native fauna, possums also prey directly on native insects and birds.

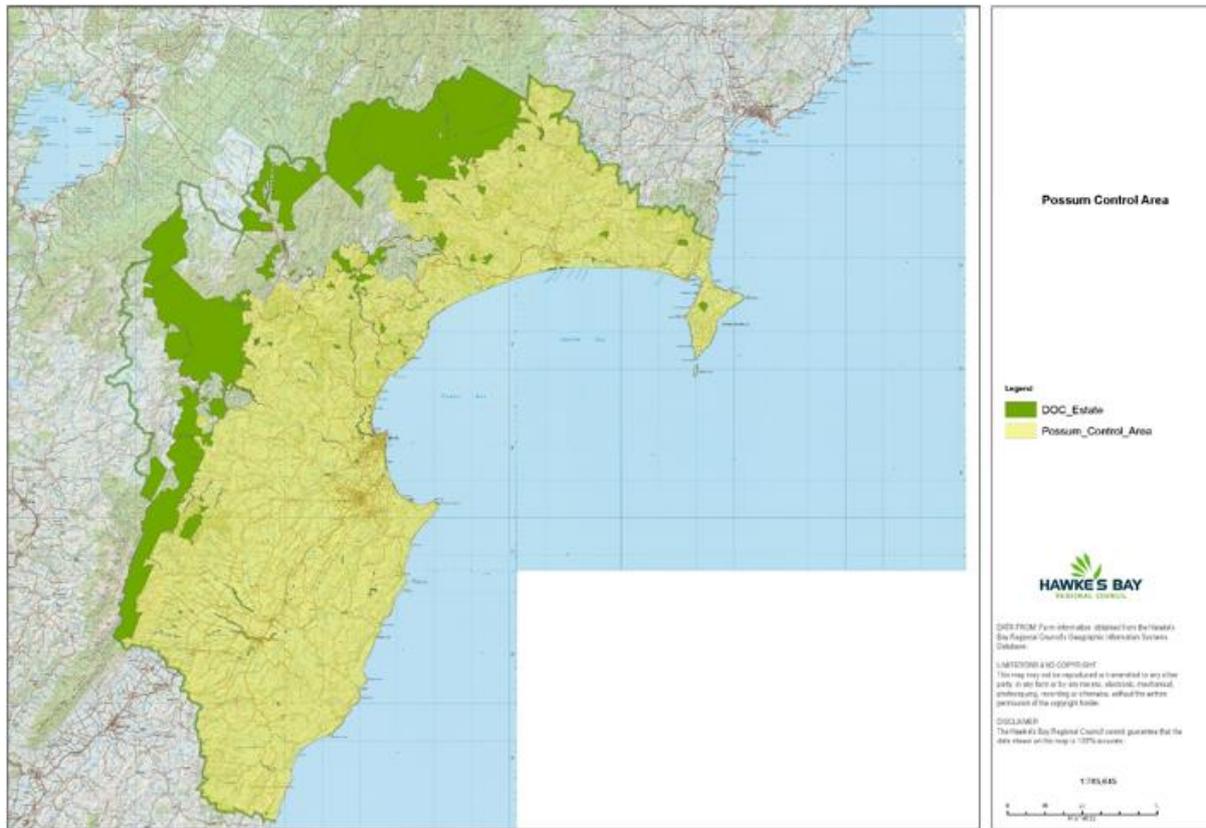


Figure 9: Possum Control Area (yellow)

## Objective 9

Over the duration of the Plan, sustainably control possums contained within Possum Control Areas to ensure population density on that land is at or below 4% residual trap catch, to minimise adverse effects on environmental values and economic well-being within the Hawke's Bay region.

### ***Principal measures to be used***

Appropriate measures drawing on **Requirement to act, council inspection, service delivery, advocacy and education** activities described in section 5.3 of the Proposal will be used to achieve the Objective.

### ***Alternative measures that have been considered***

In reviewing this programme, five options were considered:

1. Council undertakes the management of possums;
2. Increase PCA programme monitoring and compliance activity;
3. Converting Possum Control Areas to Predator Control Areas;
4. Status quo; or
5. Do nothing – remove the possum programme from the RPMP.

Through discussion document feedback and discussions held with key stakeholders, option two was identified as the preferred option. It was agreed that the required increase of \$2/ha to undertake option one was not acceptable to the regional community.

## Plan Rule 10

An occupier within a Possum Control Area (figure 9 above) shall maintain possum densities on their land at or below 4% residual trap catch, in accordance with the Hawke's Bay Regional Possum Control Technical Protocol (PN 4969).

A breach of this rule creates an offence under section 154N (19) of the Act.

### ***Explanation of rule***

The reason for this rule is to protect past investment in possum control on their property by ensuring possum population levels remain below the threshold at which economic well-being and environmental values are threatened.

### ***Advice Note***

This rule **will not apply** to any occupier who remains within a Tb Management Area where possums are being actively managed by OSPRI (a not-for-profit limited company consisting of two wholly-owned subsidiaries, TBfree New Zealand Ltd and NAIT Ltd.) at or below 4% residual trap catch.

### ***Statutory obligation***

Sections 52 and 53 of the Biosecurity Act 1993, which prevent the communication, release, spread, sale and propagation of pests, must be complied with. These sections should be referred to in full in the Biosecurity Act 1993. A breach of these rules creates an offence under section 154(O) of the Act.

## Plan Rule 11

*Note: This is designated a Good Neighbour Rule*

Except where an occupier of land has entered into a Written Management Agreement approved by Hawke's Bay Regional Council, an occupier within, or adjacent to, a Possum Control Area, shall, on receipt of a written direction from an Authorised Person maintain possum densities on their land at or below 4% residual trap catch in accordance with the Hawke's Bay Regional Possum Control Technical Protocol (PN 4969) within 500 metres of the adjoining property boundary where the occupier of the adjoining property is also maintaining possum densities on their land at or below 4% residual trap catch in accordance with the Hawke's Bay Regional Possum Control Technical Protocol (PN 4969) in order to protect economic well-being and environmental values.

A breach of this rule creates an offence under section 154N (19) of the Act.

### ***Explanation of rule***

The reason for this rule is to manage the spread of possums causing unreasonable costs to the adjacent occupier where active possum management is being undertaken by that occupier.

### ***Advice Note***

This rule **will not apply** to any occupier who remains within a Tb Management Area where possums are being actively managed by OSPRI (a not-for-profit limited company consisting of two wholly-owned subsidiaries, TBfree New Zealand Ltd and NAIT Ltd.) at or below 4% residual trap catch.

### ***Statutory obligation***

Sections 52 and 53 of the Biosecurity Act 1993, which prevent the communication, release, spread, sale and propagation of pests, must be complied with. These sections should be referred to in full in the Biosecurity Act 1993. A breach of these rules creates an offence under section 154(O) of the Act.

## Appendix 2 – Possum eradication programme insert from Hawke’s Bay Regional Pest Management Plan 2018 – 2038

### 6.2.9 Possums

#### *Description*

The Australian Brushtail Possum is a nocturnal marsupial introduced and liberated in New Zealand by private individuals and acclimatisation societies between 1837 and 1898 to establish a fur trade. Possums were accorded various levels of protection until 1947. When it became clear that the environmental damage inflicted by them far outweighed any profit made from their skins, this protection was lifted.



Possums in New Zealand occur as two colour types, “blacks” and “greys”. Adult male blacks vary from rich red-brown to brown, the females have a darker or black-brown fur. Adult male greys are often strongly rufous in the neck and shoulders while the greys often have a distinct silver tinge in the fur.

Size and weight are dependent on habitat. In good conditions adult possums can weigh between 3 to 5 kilograms. Their life span is about nine years. Possums reach reproductive maturity at approximately two years of age. Usually females rear three young every two years.

Possums can be found throughout Hawke’s Bay. Their favoured are generally found in bush/pasture margins as these provide a plentiful supply of food and suitable habitat.

#### *Adverse effects*

Possums are considered the major animal pest in New Zealand. In farming areas, they spread bovine tuberculosis to beef and dairy cattle, and to farmed deer, damage crops and orchards, kill poplars and willows planted to control hill-country erosion and stabilise riverbanks, and eat pasture. In exotic forest plantations they kill young trees and stunt the growth of older trees by ring-barking them or breaking the uppermost branches. In native vegetated areas, possums cause severe damage by altering habitats important to native animals and birds. Tree species that are palatable to possums (e.g. rata, kamahi, and pohutukawa) become much reduced or locally extinct, and are replaced by plants that are less palatable such as tree ferns and pepperwood. As well as altering the composition of native forests and competing with native fauna, possums also prey directly on native insects and birds.

### Objective 3

Over the duration of the Plan, where possible, eradicate possums within those areas identified as Possum Eradication Areas in accordance with the Hawke’s Bay Regional Possum Control Technical Protocol (PN 4969), to minimise adverse effects on environmental values and economic well-being within the Hawke’s Bay region.

#### *Principal measures to be used*

Appropriate measures drawing on **Requirement to act, council inspection, service delivery, advocacy and education** activities described in section 5.3 of the Proposal will be used to achieve the Objective.

#### *Alternative measures that have been considered*

The following five options were considered when reviewing the Possums Control Area programme:

6. Council undertakes the management of possums;
7. Increase PCA programme monitoring and compliance activity;
8. Converting Possum Control Areas to Predator Control Areas;
9. Status quo; or
10. Do nothing – remove the possum programme from the RPMP.

Possum eradication was not included as an option due to not having the tools to achieve this goal. Through the release of recent research undertaken by Zero Invasive Pests Ltd and potential future funding from Predator Free Ltd, it is likely that possum eradication will be feasible within the duration of this plan. The Council has better skills and resources for undertaking eradication activities than individual persons do. Relying on or requiring individual voluntary action (do nothing approach) as a means of achieving the Objective would likely fail.

## Plan Rule 2

All occupiers within a Possum Eradication Area identified in the Hawke's Bay Regional Possum Control Technical Protocol (PN 4969) shall maintain possum eradication status in accordance with that Protocol.

A breach of this rule creates an offence under section 154N (19) of the Act.

### ***Explanation of rule***

The reason for this rule is to protect the investment in possum eradication on their property by ensuring possums do not re-establish threatening the economic well-being and environmental values being protected.

### ***Statutory obligation***

Sections 52 and 53 of the Biosecurity Act 1993, which prevent the communication, release, spread, sale and propagation of pests, must be complied with. These sections should be referred to in full in the Biosecurity Act 1993. A breach of these rules creates an offence under section 154(O) of the Act