HAWKE'S BAY
REGIONAL COUNCIL

REGIONAL PEST MANAGEMENT PLAN

DISCUSSION DOCUMENT 2017

REGIONAL PEST MANAGEMENT PLAN

We want your feedback on this discussion document

Online

Please click on the link and complete the specific questions in the feedback form as you work through the discussion document
www.hbrc.govt.nz, search #submissions

Email
If you would like to make further comments on specific pests, you can email feedback to **pestplan@hbrc.govt.nz**

Write
Freepost 515, RPMP Review,
Hawke's Bay Regional Council,
Private Bag 6006, Napier 4142
by Friday 7 July 2017. This information will be used only to inform the development of a future plan. Please include your name and contact address.

Please submit your feedback to www.hbrc.govt.nz, search #submissions by Friday 7 July 2017

This discussion document is available online www.hbrc.govt.nz, search #biosecurity.
The current pest strategies are also available here.

Hawke's Bay Regional Council is reviewing the way it approaches pest management.

We want to know what you think of the changes we are considering as part of the current review of the Regional Pest Management Plan.

The purpose of this discussion document is to seek feedback from residents and ratepayers on the best way to continue to manage and control a range of plant, animal and marine pests, in order to protect the region's economy and environment. In this discussion document, we have focussed on key pests and areas which may require new or different approaches.

Feedback on this discussion document will inform the formal statutory process for the 2018-2028 Regional Pest Management Plan (RPMP). This Plan will supercede the current Regional Pest and Phytosanitary Management Strategies.

The principle goal of the Regional Pest Management Plan is to limit the adverse effects of unwanted plants and animals. These invasive species can have wide ranging effects on human health, indigenous flora and fauna, our heritage, or the economy. Over the past 15 years, approximately 80% of HBRC's biosecurity budget has been focussed on pests affecting agricultural production. There is now a growing community expectation for a greater focus on protecting our native species and habitats and to recognise the biodiversity gains achieved from our current programmes.

The RPMP plays a role in supporting the Hawke's Bay Biodiversity Strategy, a non-regulatory community document with the aim of halting biodiversity decline. This strategy has five key goals that can be viewed online at www.hbrc.govt.nz, search #biodiversitystrategy. The RPMP assists in achieving several of these Biodiversity Strategy objectives through key pest control programmes; for example, the Possum Control Area and Site Specific programmes significantly assist Biodiversity Objectives 1 and 2 by reducing native species predation.

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Managing pests

National legislation provides a pest classification system to define different levels of management. Pests are classified according to how severe the threat is and what control can be achieved.

HBRC actively manages 37 pests under the current Regional Pest Management Strategy (RPMS), see the table on pages 22 and 23.

For 29 of these pests, HBRC believes the current management of pest management is 'about right' and proposes to maintain it.

National legislation provides a pest classification system to define different levels of management.

Pests are assigned to the programme according to how severe the threat is, and what control can be achieved.

Every pest in a Regional Pest Management Plan is classified under one of the following programmes:

Exclusion - to prevent the establishment of a pest that is present in New Zealand but not yet established in an area or region

Eradication - to reduce the infestation level of the subject to zero in a targeted area in the short to medium term

Progressive Containment - to contain or reduce the geographic distribution of the subject to an area over time

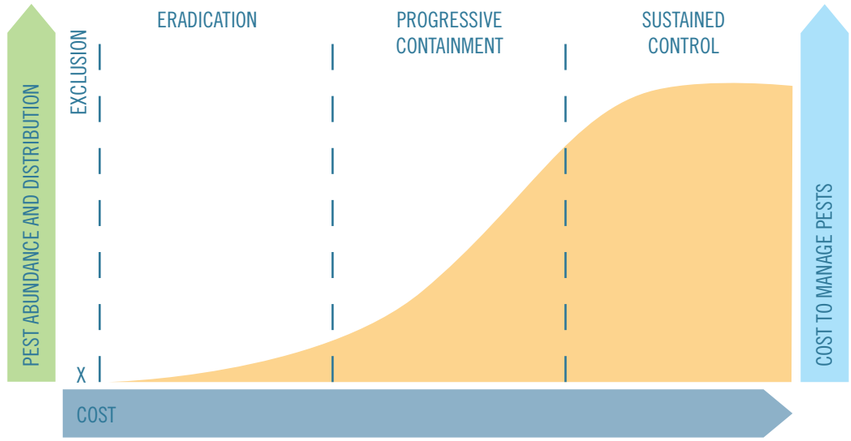
Sustained Control - ongoing control of the subject to reduce its impact and its spread to other properties

Site-led - a pest that is capable of causing damage to a place is excluded or eradicated from that place, or is contained, reduced, of controlled within the place to an extent that protects the values of that place.

Strategic relationships of Regional Pest Management Plan

The pest infestation curve

The pest infestation curve diagram is a useful way of describing what actions might be appropriate for managing any particular pest. Each area of the diagram has particular characteristics that help define what HBRC can usefully do in response.



Exclusion: At the left hand side of the diagram are pests that have not invaded our region. HBRC's role is to manage potential pathways for such pests and survey risk areas to check that these pests have not reached the region.

Eradication: If a pest manages to cross into our region and is detected before its numbers or distribution significantly increases, there may be an opportunity to eradicate the whole population.

Progressive containment: If a pest establishes before it is detected or where eradication fails, there may be an opportunity to prevent it spreading to other parts of the region or to reduce the population over time.

Sustained control: If a pest is widely established across the region, periodic or a low level of ongoing control will prevent or minimise its impacts.

Who pays?

In developing its pest management policy, HBRC needs to consider how the costs of control are allocated. There is an expectation that those who benefit from pest control or those who exacerbate pest problems should be required to pay for pest management.

For exclusion and eradication programmes, there is generally public good in preventing the pest from establishing, so management of these pests is usually undertaken by HBRC.

For progressive containment and sustained control programmes, the costs of control usually fall substantially on land occupiers who get the primary benefit. In most cases, there is also a public benefit as well which needs to be accounted for.

POSSUM CONTROL

Possums cause significant economic and environmental loss

They carry diseases such as Bovine tuberculosis, compete with livestock for pasture, and are significant predators of New Zealand's native flora and fauna.

Hawke's Bay has been highly successful in reducing the negative impacts of possums across large areas of the region, with over 700,000ha under the PCA programme.

Over the past 16 years, this programme has received significant support from the farming community, not just for primary production gains and protection from TB, but also for benefits to native plants and birds. To account for this biodiversity benefit, 30% of the programme is funded through general rate.

To maintain low possum numbers, land occupiers have two options: engage a possum contractor, or undertake their own control (self-control) as part of their day-to-day farming business.

HBRC has received feedback that, because possum numbers have been so low for so long, some land owners have stepped back from their commitment to control.

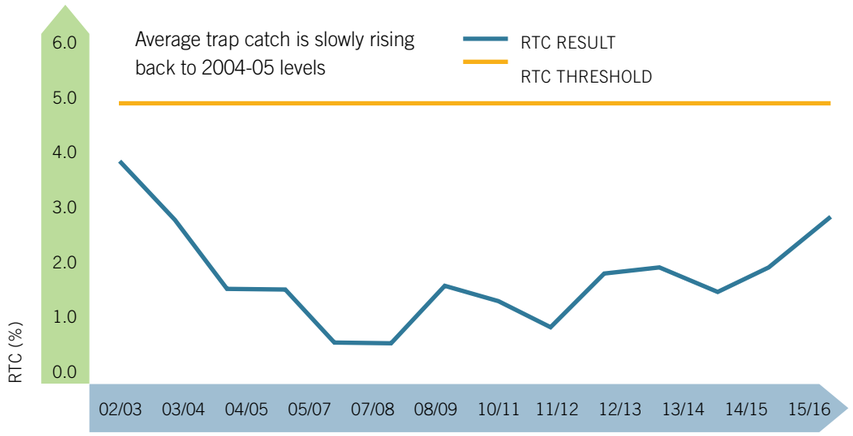
When this happens, it places a burden on adjacent neighbours who are continuing control. This situation is a risk to the long-term sustainability of the programme. Once the possum population reaches a certain threshold, reducing their numbers becomes much more expensive.

HBRC send an annual reminder to land occupiers to undertake possum control, as well as offering a 50% subsidy on possum control products at Farmlands and PGG Wrightson. Approximately 50% of farmers engage the services of a contractor to undertake possum control.

The PCA monitoring programme aims to ensure all land occupiers are actively managing possums. The overall PCA programme has a Residual Trap Catch (RTC) index of less than 5%. The graph on the following page displays possum RTC trend monitoring data from 2002 to 2015. As shown in the graph, the average RTC result is slowly returning to 2004-2005 levels.

Contractor filling bait station in the Ruahine area.

RTC trend monitoring data 2002-2015



Options for the PCA programme

One option for securing low possum densities in the future is for HBRC to manage possum control using large-scale contracts. This would ensure effective control using best practice methods and tools.

It would mean land occupiers no longer need to consider possum control alongside day-to-day farming. This option would require a targeted rate increase of approximately $2 a hectare across 700,000ha, totalling $1.4 million across the region (this would mean a 500 hectare property would pay another $1000 in targeted pest rate a year).

Another option is for HBRC to increase its monitoring and compliance activity, an increase in issue of Notices of Direction under the Biosecurity Act, combined with an increased awareness programme of the need for regular control.

Q1

Please answer the following questions using the online form:

What do you consider the best option for the future management of the PCA programme:

- **HBRC undertakes management of possums**
- **Increase monitoring and compliance programme**
- **Other suggestions?**

LARGE SCALE PREDATOR CONTROL

Background

New Zealand's biodiversity is still in decline despite significant efforts from agencies, organisations, community groups and individuals.

Predator pests such as possums, mustelids, feral cats and rats have a major adverse effect on native flora and fauna. Predator Free New Zealand 2050 (PFNZ) and its associated funding is an important political and funding milestone in the war against predator pests.

Public conservation land, sanctuaries, urban communities and farmland all have a role in achieving a predator-free nation. Farmland is particularly important because it accounts for two-thirds of our nation's land area.

Farmland predator control, combined with appropriately targeted intensive management of sites with high biodiversity value, gives the greatest likelihood of:

- significant long term integrated biodiversity recovery
- primary production benefits across New Zealand
- widespread community understanding of the importance of biodiversity to New Zealand.

How would this programme work?

Land occupiers would be asked if they want to convert their current Possum Control Area into a Predator Control Area

Benefits, costs and commitments would be discussed. If 75% of land occupiers agree, the entire PCA would be entered into the programme. Initial predator control and installation of trap network would be undertaken and paid for by HBRC and funding partners.

Once densities are low, land occupiers would be required to maintain low predator densities through the use of a contractor or clearing activated kill-traps themselves during business as usual activities. HBRC would undertake monitoring to make sure all land occupiers are clearing traps. This is the type of partnership, between the regional council and landowners, which has been successful for the possum control programme over the last two decades.

The shift from possum control to including other predators would increase the public good associated with the pest programme, as greater biodiversity outcomes would be achieved regionally. Currently most biosecurity activities are funded 70% targeted rate and 30% general funding. This greater public good may require a different mix of targeted rate and general funding for predator control areas.

A Predator Free Hawke's Bay

The vision of a predator free New Zealand has captured the attention of our nation.

Regional and unitary authorities have key roles in supporting communities to undertake predator control.

HBRC, alongside our community in the Cape to City Project, is showing how farmland predator control can be achieved.

Q2

Please refer to online feedback form

If HBRC funded initial predator control and ongoing costs of maintenance are at a level sustainable by a regional community, would you support adding, large-scale predator control to the RPMP?

- Yes
- No
- Why?

FERAL GOATS

In Hawke's Bay, feral goats are considered both a pest and an economic resource

Feral goats are pests in ecological areas and farmland. In farmland, feral goats damage fences, graze pasture, transfer animal health issues, and damage exotic and riparian plantings.

In indigenous vegetation areas, goats alter the composition and structure of the understorey, inhibiting regeneration and often completely removing favoured food plants from an ecosystem.

Long-term intensive goat browse can lead to forest collapse, having a direct impact on bird species, sediment runoff and water quality.

However, feral goats are also an economic resource. They are used as a management tool for woody weeds, particularly blackberry and gorse, in some hill country areas, and provide revenue from the production of meat and fibre. There is also some value in opportunities goats provide for recreational hunting.

While goats are well established across most of the northern half of Hawke's Bays' farmland and exotic forestry landscape, densities are significantly lower in the southern half of the Hawke's Bay and in the higher altitude indigenous areas.

To assess the views of the farming community, a survey was conducted in the northern Hawke's Bay region in 2011. Damage to fences was ranked as the most serious impact of feral goats, while a reduction in the cost of weed control was the most valued benefit.

Another significant change that will impact goat management is the increase in native planting that will take place in Hawke's Bay over the next 20 years. Much of this planting will be driven by Regional Plan changes under the National Policy Statement for Fresh Water. This increased planting will increase the tension between the need to protect planting investments on one property and the rights of adjacent land owners to use goats as a farm management tool.

Current management approach

Feral goats are currently regarded as a pest under the Site Specific category, with non-regulatory goat Coordinated Management Areas (CMA).

This voluntary approach aimed to provide the ability, through discussion and agreement, to protect native areas and habitat plantings from goat damage while balancing the property rights of land occupiers who use goats as a management tool. Two CMAs have been established: at Maungaharuru (Boundary Stream) and at Mahia Peninsula.

CMA's do not, however, protect a planting investment where an adjacent landowner using goats as a management tool chooses not to participate in the CMA. Goat management within the region needs to balance two important property rights. These are:

- The right of a land owner to use goats as a farm management tool
- The right of a land owner adjacent to someone using goats as a farm management tool to have their planting investment protected from those goats on their property.

Potential options for managing feral goats:

1. Status quo - keep the current site-specific RPMP objective and non-regulatory CMA programme;

2. Create binding Goat Management Areas - (>10,000 ha) if 75% landowners or 75% of land area sign up, it becomes binding. Land owners and occupiers would be required to develop a goat management programme in partnership with HBRC to actively manage feral goats.

3. Add a boundary control rule - in principle, this would require an investment on one farm (such as a native planting programme) being adversely affected by goats from an adjacent property.

If the adjacent property claims to be using goats as part of their farm management practises, they would be required to contain them through upgrading boundary fencing.

Q3

Please refer to online feedback form

What do you believe is the best method for HBRC to manage feral goats?

- **Status quo – non-regulatory approach**
- **Create binding Goat Management Areas**
- **Add a boundary control rule to protect native plantings**
- **Other suggestions?**

PRIVET

Privet programme: total eradication unlikely

Chinese privet and Tree privet are currently listed in the Hawke's Bay Regional Pest Management Strategy as Total Control - Service Delivery.

The aim of the programme is to prevent significant adverse effects on human health, through eventual eradication of privet in the control areas.

HBRC commits a significant amount of resource in the privet control programme but, despite this, eradication is unlikely. In addition, research has indicated that unless other more allergenic pollens such as grasses, weeds (mainly English plantain) and trees (including birch and olive) are controlled, the current privet programme is likely to have minimal impact on preventing significant adverse effects of hay fever for urban communities

The RPMP review proposes that the privet programme becomes much more targeted with clear impact of privet required before resources are used to remove privet. It also proposes that the eradication goal is changed.

Research on the human health impacts of privet

Hawke's Bay Regional Council, in partnership with other regional councils, commissioned two privet allergy research programmes.

Auckland Allergy Clinic research programme concluded that privet should not be considered as a significant allergen. Most people who experience symptoms during the privet flowering season are reacting to the more allergenic pollens such as grasses, weeds (mainly English plantain), or trees such as birch and olive.

The University of Auckland research programme concluded that there were no significant differences between privet and the control. Further, there were no significant differences observed between the reported symptoms in the 'hay fever' and 'no hay fever' group following exposure to high levels of privet scent.

Left: Chinese Privet
(Ligustrum sinese)

Right: Tree Privet
(Ligustrum lucidum)

Other options to tackle privet

Privet lace bug (pictured right), a biocontrol for Chinese privet, was released at two sites (Wairoa and Te Aute) in Hawke's Bay in 2016. Its natural spread is slow, but can be accelerated with additional release sites. It is too soon to know what impact it will have in Hawke's Bay, but promising signs of establishment have been observed elsewhere. Significant damage has already been observed on potted plants and at field sites, suggesting the lace bug could be a highly-effective agent in time.

Q4

Please refer to online feedback form

What do you think HBRC should do about privet?

- **Remove the privet programme from the RPMP**
- **Continue the privet programme with restrictions**

  HBRC would require a doctor's certificate/positive blood test for allergic reaction before action is taken. HBRC would manage the cost of removal of trees that must be within 50 metres of a complainants' residence or workplace, or require neighbouring landowners to prune hedges to prevent flowering. HBRC could also increase the privet biocontrol release programme.
- **Other suggestions?**

CHILEAN NEEDLE GRASS

An enemy of farm productivity

Chilean needle grass (*Nassella neesiana*) is an invasive pest plant that poses a significant threat to the sustainability of farming in Hawke's Bay.

The grass displaces desirable pasture and is unpalatable to stock when seeding (November to February). Its sharp, needle-like seeds can penetrate the skin and muscle of stock causing major health and welfare issues, including painful abscesses and blindness.

Chilean needle grass most likely established in Hawke's Bay in the 1930s and is now present on approximately 130 properties, covering approximately 650 ha. It occurs in Maraekakaho, Te Aute, Havelock North, Bayview, Puketapu, Omakere, Poukawa, Porangahau, Waipawa and Waipukurau. It is also present in Marlborough and North Canterbury and has the potential to infest an estimated 15 million hectares nationwide.

Chilean needle grass is very difficult to identify, which can lead to it becoming established over large areas of land. It is particularly invasive in low fertility soils and poor pastures. It can be spread long distances on clothing, footwear, animals, vehicles, machinery, equipment and contaminated feed.

It is difficult to contain once established, with effective control requiring long-term management programmes that are often expensive and disruptive.

Chilean needle grass is declared a pest in the Hawke's Bay Regional Pest Management Strategy as Total Control - Occupier Responsibility.

The objective of the Chilean needle grass programme is to contain the population within the known infested properties and prevent its establishment elsewhere. There are pathway management rules in place for the making of hay (silage/stock feed/cropping), paddock resowing, movement of stock, harvesting of forestry blocks, soil movement and mowing.

Management of Chilean needle grass needs to minimise the plant's spread while balancing property rights. Cost of control and restrictive containment requirements, combined with reduced stock-carrying capacity, potential inability to sell stock (except for slaughter) and crops (including hay), can have an major impact on the income and financial viability of a property. Although Council staff undertake monitoring for CNG, significant reliance is also placed on landowners voluntarily alerting biosecurity staff of CNG on their property. There is a need to balance reducing the risk of spread to land owners who do not have CNG and supporting those who do have it to manage this invasive weed pest.

Left: Chilean needle grass can cause major health and welfare issues for stock

Options for management

The current RPMS management programme has had a positive impact on minimising the spread of Chilean needle grass - however the current programme objective is not being met.

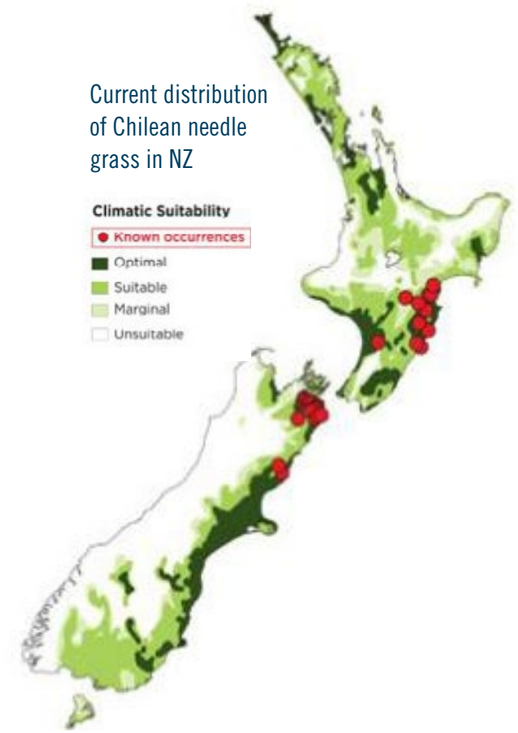
Potential options to further reduce the potential spread of Chilean needle grass are:

Increase restrictions on hay making/bailage/silage. This has been identified as one of the highest risk activities to the current programme. Further restrictions could specify that no pasture or crop can be cut in known Chilean needle grass infestations during November to March, to minimise the potential of seed being caught in machinery.

Add Chilean needle grass to LIM reports. This option could be used to ensure land purchasers are aware that Chilean needle grass is on the property and the duties required to prevent its spread. However, this strategy could pose a risk to the current programme, by acting as a disincentive for land occupiers to report new infestations, and souring relationships with those who inherited this pest though no wrongdoing on their part.

Increase surveillance programme during panicle flowering (Nov-Dec). This would allow for quicker detection of new populations and a more rigorous compliance monitoring programme

Current distribution of Chilean needle grass in NZ



Q5

Please refer to online feedback form

How do you think HBRC should manage Chilean needle grass:

- **Increase restrictions on the making of hay/baleage/silage?**
- **Add Chilean needle grass to LIM reports?**
- **Increase surveillance programme during panicle flowering?**
- **Other suggestions?**

Management of marine pests in Hawke's Bay

Marine pests compete with and prey on indigenous species, modify natural habitats, affect marine industries, and alter ecosystem processes.

Their impact on native species and habitats means they pose a risk to our natural and cultural heritage and to commercial and recreational fishing, shellfish harvesting, and aquaculture. Marine pests are typically moved around attached to boat or ship hulls, or in ballast water.

In 2015, 351 non-indigenous species were identified in New Zealand's coastal waters, of which more than half (187) had established a breeding population in our marine environment.

Since 2009, the number of non-indigenous species in New Zealand has risen by 10 percent, with 33 new species recorded between 2010 and 2015. In the Auckland region alone, 141 marine non-indigenous species (NIS) have been detected to date.

Marine pests are very difficult and expensive to control once established, due to rapid dispersal of very large numbers of juveniles and a lack of safe, effective control technologies. Biosecurity New Zealand's 2009 study estimated the economic loss from marine pests at $15 million a year, however this did not include ongoing expenditure on restricting pests.

Non-market costs could include the loss of shellfish beds and children being unable to paddle at the water's edge. Managing the pathways by which organisms are introduced and spread can be a much more efficient method of dealing with marine pests.

Two key marine pests of concern are Mediterranean fanworm and clubbed tunicate, which are slowly spreading to different regions in New Zealand. They can form dense colonies that displace native and fisheries species, prey on larvae of fisheries species, disrupts natural ecological balance and foul boats, aquaculture and marine structures.

Photo: www.abovehawkesbay.com

Inset: An example of poor biosecurity practice

Main: Recreational vessels moor at Ahuriri Harbour

Marine biosecurity in Hawke's Bay

The Regional Pest Management Strategy does not include any programmes for marine pests.

Currently there are only two known marine pests in Hawke's Bay: Asian kelp *(Undaria pinnatifida)* and Australian tubeworm *(Ficopomatus enigmaticus)*.

Hawke's Bay's steep rugged exposed coastline and rough ocean has helped protect it from marine pests. Comparative to other regions, Hawke's Bay receives few recreational vessels annually. There are few places to safely anchor overnight, resulting in most vessels entering Ahuriri Harbour.

In 2016, HBRC undertook a marine pest risk assessment, using annual vessel data, focusing on port of origin. Alarmingly 17% of vessels would have been categorised as high-risk, due to their port of origin having a known, established population of Mediterranean fanworm and/or clubbed tunicate. There is a very real threat of Mediterranean fanworm and clubbed tunicate establishing at Ahuriri Harbour if no biosecurity measures are put in place.

Top: Asian kelp (*Undaria pinnatifida*)

Middle: Clubbed tunicate, (*Styela clava*)

Bottom: Mediterranean fanworm, (*Sabella spallanzanii*) Image: G.Read NIWA

Threats to our marine environment

MARINE SPECIES	DESCRIPTION	IMPACT AND HISTORY
Asian bag (date) mussel *Arcuaatula senhousia*	Small, thin-shelled mussel that lives in estuaries	• Modifies native habitats • Established in Auckland in the 1970s
Asian paddle crab *Charybdis japonica*	Large, aggressive swimming crab	• Predator of native species • First recorded in the Auckland region in 2000
Australian droplet tunicate *Eudistoma elongatum*	Sea squirt that forms long, white cylindrical tubes	• Smothers beaches, rocks, and tide pools and a pest to aquaculture • First reported in Northland in 2005
Greentail (greasy back) prawn *metapenaeus bennettae*	Prawn that grows to about 13cm in length	• Estuarine deposit feeder • First recorded in Waitemata Harbour in 2009
Mediterranean fanworm *Sabella spallanzanii*	Very large, fast-growing worm that builds long, flexible tubes up to 1 metre in length	• Pest of aquaculture and other industries • Modifies natural habitats • Affects cycling of nutrients within natural ecosystems • Establishment date not reported
Clubbed tunicate *Styela clava*	Rapid growing sea squirt that forms dense colonies	• Pest of aquaculture and other industries • Establishment date not reported
Fragile clam *Theora lubrica*	Small bivalve (shellfish with two hinged shells)	• An indicator of marine pollution • Present since the 1970s
Undaria *Undaria pinnatifida*	Fast-growing brown kelp	• Pest of aquaculture and other industries • First reported in New Zealand in 1987

Source: Inglis and Seaward (2016)

Photo courtesy of Northland Regional Council.

Marine pest management options

Hawke's Bay's restricted number of ports presents an opportunity to manage the main vector pathway, this being boat hulls entering Hawke's Bay waters, at a relatively low cost.

This could be achieved through the following:

- Declare Mediterranean fanworm and clubbed tunicate as pests under the Exclusion category
- Add a level of foul rule for hulls (Craft Risk Management Standards)
- Develop risk analysis to detect and respond to high risk vessels entering Hawke's Bay waters
- Run a marine pest education and awareness programme to promote best practice and minimise their spread
- Undertake marine pest surveys at Ahuriri Harbour
- Advocate to MPI to undertake marine pest surveys at the Port of Napier.

Photo top: Asian paddle crab

Photo inset: The Australian droplet tunicate (a sea squirt) in Rangaunu Harbour in the far north of the North Island. The tunicate smothers beaches, rocks, and tide pools and is a pest of aquaculture

Q6

Please refer to online feedback form

Do you agree with HBRC's approach for managing marine pests?

- **Yes** **No**
- **Why?**
- **Do you recommend another approach for managing marine pests?**

HORTICULTURAL BIOSECURITY

Overseas pests are a significant threat to Hawke's Bay

In 2010, Horticulture New Zealand announced its goal to become a $10 billion industry by 2020. Now past the halfway mark, horticultural exports are growing strongly and on track to meet their target. Exports increased by 40% from June 2014 to 2016 and this rapid growth is predicted to continue.

Hawke's Bay is one of New Zealand's largest fruit producing regions, with over 11,500ha in orchards. Hawke's Bay is also the second-largest vegetable producer, with a planted area of 8,800ha, equating to 17% of New Zealand's vegetable production.

Apple exports surpassed $500 million in 2016 and other fresh fruit, including stone fruit, totalled $122 million. New Zealand is now renowned as the top apple producing country in the world, with the Hawke's Bay playing a large role in this success.

The New Zealand wine industry export value lifted 10% in 2016 to just under $1.6 billion. The Hawke's Bay producing vineyard area is 4,744ha (13% of national area) making it an important horticultural producer.

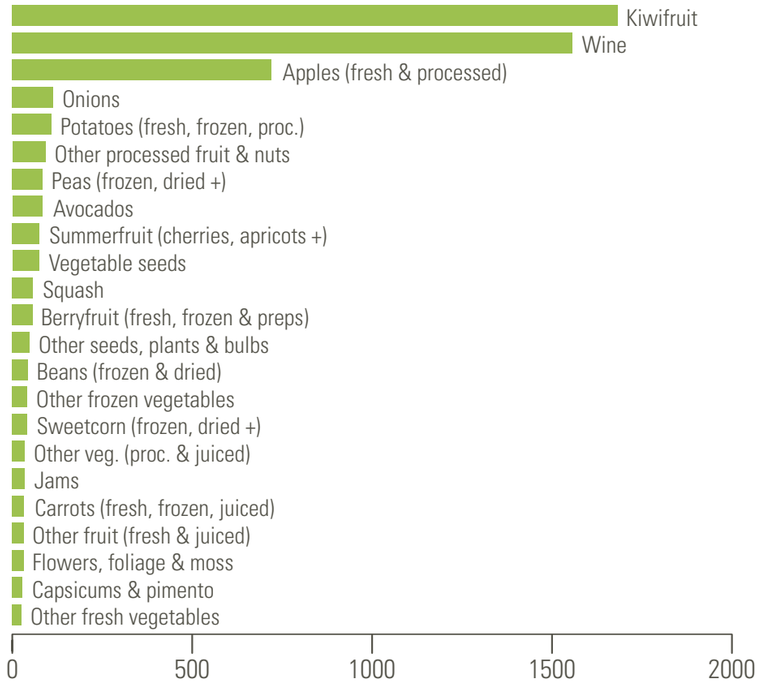
One of the main threats to this success is the arrival of new pests from overseas. MPI is responsible for preventing new organisms establishing here, and has recently formed Government Industry Agreements (GIA) with the horticultural industry, as a partnership approach to managing incursions.

HBRC staff work with the horticulture industry to manage regional risks, including pests such as rabbits and possums. In 2006, HBRC produced a Regional Phytosanitary Pest Management Strategy, which gave the horticulture industry a mechanism for managing the threat of pests proliferating out of unmanaged orchards.

Top of page:lightbrown apple moth.Image by Lymantria (Wikipedia Commons).

The leafroller species Epiphyas postvittana, or the lightbrown apple moth (LBAM). Image courtesy of University of California

Horticultural exports from NZ 2016 ($ million, fob)



Source: Statistics New Zealand

Q7

Please refer to online feedback form

How else could HBRC assist the horticulture industry in the biosecurity space?

PESTS COVERED BY PLAN

Current Pests (See page 4 for category definitions)

PEST SPECIES	KINGDOM	PROPOSED CATEGORY	CHANGES TO RESOURCING
Feral cat	Animal	Site-led	Medium
Feral deer	Animal	Site-led	None
Feral goat	Animal	Site-led	Low
Feral pig	Animal	Site-led	None
Mustelids (Ferret, stoat, weasel)	Animal	Site-led	Medium
Possum	Animal	Sustained Control	Medium
Rabbit	Animal	Sustained Control	None
Rats (ship and Norway)	Animal	Site-led	None
Rook	Animal	Eradication	None
African feather grass	Plant	Eradication	Low
Apple of Sodom	Plant	Progressive Containment	None
Australian sedge	Plant	Progressive Containment	None
Bathurst bur	Plant	Site-led	None
Blackberry	Plant	Site-led	None
Chilean needle grass	Plant	Sustained Control	Low
Cotton thistle	Plant	Progressive Containment	None
Goats rue	Plant	Eradication	None
Gorse	Plant	Site-led	None
Japanese honeysuckle	Plant	Site-led	None
Lodgepole pine	Plant	Progressive Containment	None
Nassella tussock	Plant	Progressive Containment	None

Q8

Please refer to online feedback form

Are there any other pests you think should be included in the Regional Pest Management Plan?

Current Pests (continued)

PEST SPECIES	KINGDOM	PROPOSED CATEGORY	CHANGES TO RESOURCING
Nodding thistle	Plant	Site-led	None
Old man's beard	Plant	Site-led	None
Phragmites	Plant	Eradication	None
Privet (Site-led)	Plant	Site-led	Reduction
Ragwort	Plant	Site-led	None
Saffron thistle	Plant	Progressive Containment	None
Spiny emex	Plant	Eradication	None
Variegated thistle	Plant	Site-led	None
White-edged nightshade	Plant	Eradication	None
Woolly nightshade	Plant	Progressive Containment	Low
Yellow water lily	Plant	Eradication	None
Apple black spot	Disease	Site-led	None
Codling moth	Insect	Site-led	None
European Canker	Disease	Site-led	None
Fireblight	Disease	Site-led	None
Lightbrown Apple Moth (Leafroller)	Insect	Site-led	None

Potential Pests

PEST SPECIES	KINGDOM	PROPOSED CATEGORY	CHANGES TO RESOURCING
Wallaby	Animal	Exclusion	New
Cathedral Bell	Plant	Eradication	New
Purple loostrife	Plant	Eradication	New
Darwin's barberry	Plant	Progressive containment	New
Velvetleaf	Plant	Progressive containment	New
Mediterranean fanworm	Marine	Exclusion	New
Clubbed tunicate	Marine	Exclusion	New

Q9

Please refer to online feedback form

Are there any pests that should be removed from the Regional Pest Management Plan?

Q10

Do you have any further comments?

Please refer to online feedback form www.hbrc.govt.nz, search #submissions

Hawke's Bay Regional Council, Private Bag 6006, Napier 4142

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