

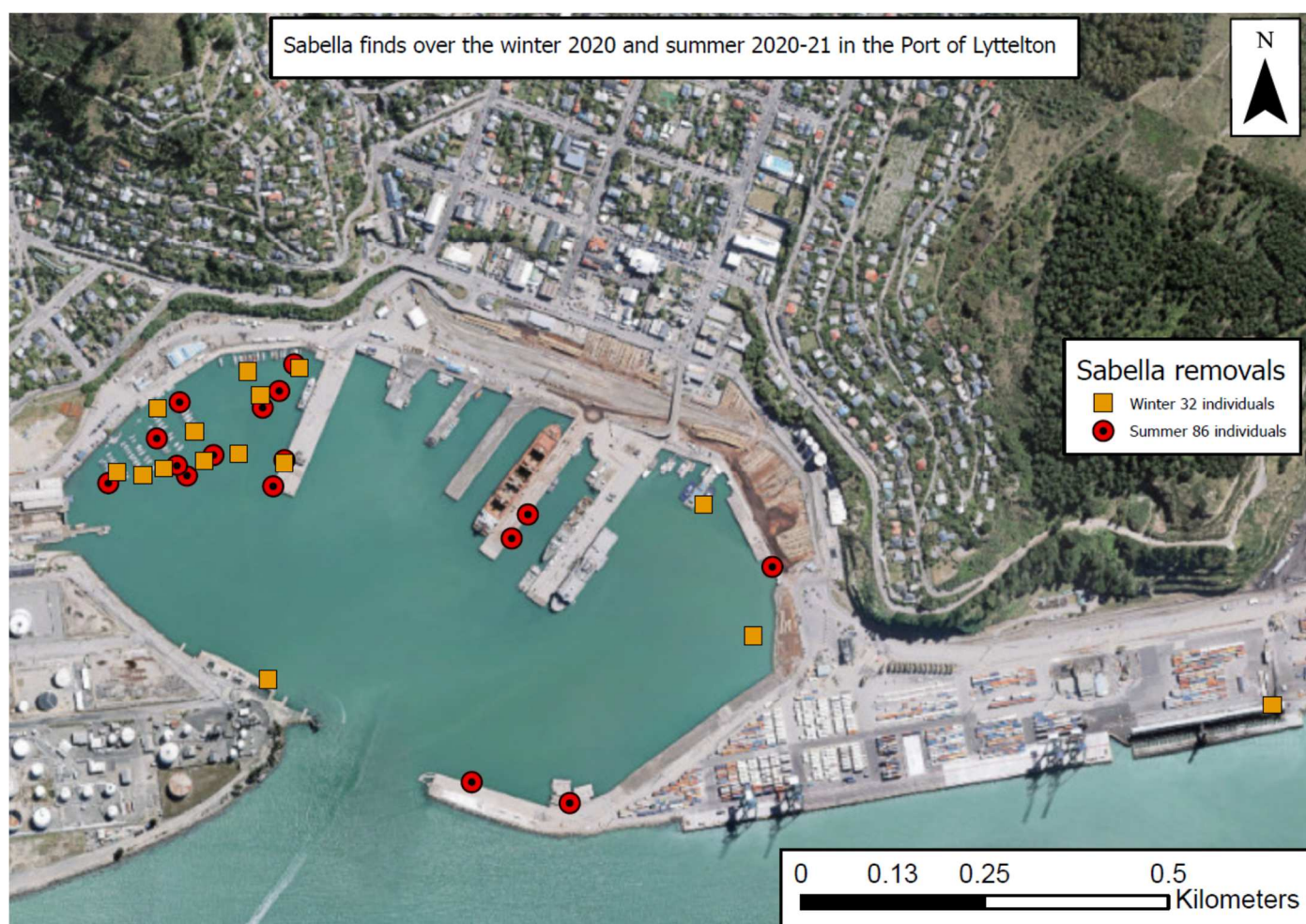
## REGIONAL BIOSECURITY UPDATE – MAY 2021

### MEDITERRANIAN FAN WORM

Biosecurity New Zealand (Ministry for Primary Industries) lead the Marine High-Risk Site Surveillance (MHRSS) program at key ports around the country. The National Institute of Water and Atmospheric Research (NIWA) undertakes the MHRSS under contract to Biosecurity NZ to detect new to New Zealand species, as well as Mediterranean fanworm (Sabella) which is an Unwanted Organism (and a Notifiable Organism). The MHRSS is undertaken twice a year, during winter and summer months.

Sabella was first detected in NZ at Lyttelton in 2008. In early December 2020, the MHRSS survey of Lyttelton found an increasing number of Sabella there (note they were all collected and disposed to landfill). However, the NIWA divers are not contracted to carry out an elimination program for Sabella and the current suppression approach is unlikely to be effective anymore, given the increasing numbers they are finding. This is what the MHRSS program lead told us about their findings in December:

Sabella was detected at 16 of 30 diver search locations within the Port of Lyttelton. All specimens detected on wharf piles and marina pontoons were removed and disposed of to landfill, totalling 86 worms.



Environment Canterbury are currently working with Biosecurity New Zealand, Lyttelton Port Company and Ngāi Tahu on the delivery of a program of work associated with obtaining a better understanding of the distribution of Mediterranean Fanworm within Whakaraupō/Lyttelton Harbour.



This joint organisation project is being led by ECan under a Charter (in process of completion) with the above partners. Funding for the project is split 50/50 with Biosecurity New Zealand. The project will undertake a delimiting survey to understand the extent of its spread. On completion of the delimiting survey a stage gate will occur to discuss what action will be taken next if any dependant on the information obtained through the survey.

ECan will also be undertaking surveys in Timaru and Akaroa harbours.

## **VELVETLEAF**

When the eradication objective for Velvetleaf was determined as not feasible (at least within the medium term), workshops were held to determine a way forward with MPI and relevant Industry Partners, forming a Steering Group for a velvetleaf management plan.

The initial workshop, in March 2016, looked at some of the options for long term management, followed by subsequent workshops in 2017. An agreed approach to long term management was delivered through a Long Term Management Strategy (2017-2021).

Work has since been focused on 4 contracted Outreach positions who have been working with affected land occupiers on containment, land management, farm biosecurity and hygiene and reacting to new finds of velvetleaf.

A review of the Strategy and further agreement to determine the future direction of the Programme is taking place at present. Considerations for long term management are in relation to the future management programme, delivery activities, delivery responsibility, regulatory considerations, and research requirements.



**A velvetleaf patch left to seed for 3 years. Photo credit: Trevor James, AgResearch**



## CHILEAN NEEDLE GRASS SURVEY

Manaaki Whenua Landcare Research is conducting research for MPI and Council's into farmers' opinions about Chilean needle grass.

The results of the survey will be used by MPI, Regional and District Councils to work with farmers on plans to manage Chilean needle grass in the future. Information from the survey will be used by Manaaki Whenua Landcare Research as a basis for preparing a report for MPI and Councils

The research team involves Dr Geoff Kaine and Dr Norm Mason from Manaaki Whenua Landcare Research.

## GORSE AND BROOM DETECTION – PROOF OF CONCEPT

Purpose: To investigate new and innovative ways of using GeoAI to provide added value to ECan.

Gorse & Broom - Identify Gorse and Broom for risk and prioritisation. Can we predict where gorse and broom are growing to gain better information for decision makers, including:

- Q: Complying with CRPMP rules?
- Q: Can we ID scattered plants?
- Q: Can we ID boundary issues?
- Q: Can we enhance inspection process?



The project proved it is possible to detect gorse and broom and determine CRPMP requirements on individual properties over large areas of Canterbury. Next steps – compare the costs of implementation to the current costs, assess productivity gains, re-assess business processes and procedures. Concerns over privacy issues raised are being investigated.

## WEED RISK IN CANTERBURY – an assessment of 30 terrestrial species

AgResearch have completed preliminary research on 30 plant species that are of concern to Environment Canterbury. This included.

(1) a weed risk ranking of species for Canterbury. Proposal to use a novel approach to rank the 30 species according to the risk they pose to Canterbury based on: weed science literature occurrences; invaded range occurrences; climate matching; Global Compendium of Weeds weed status classification

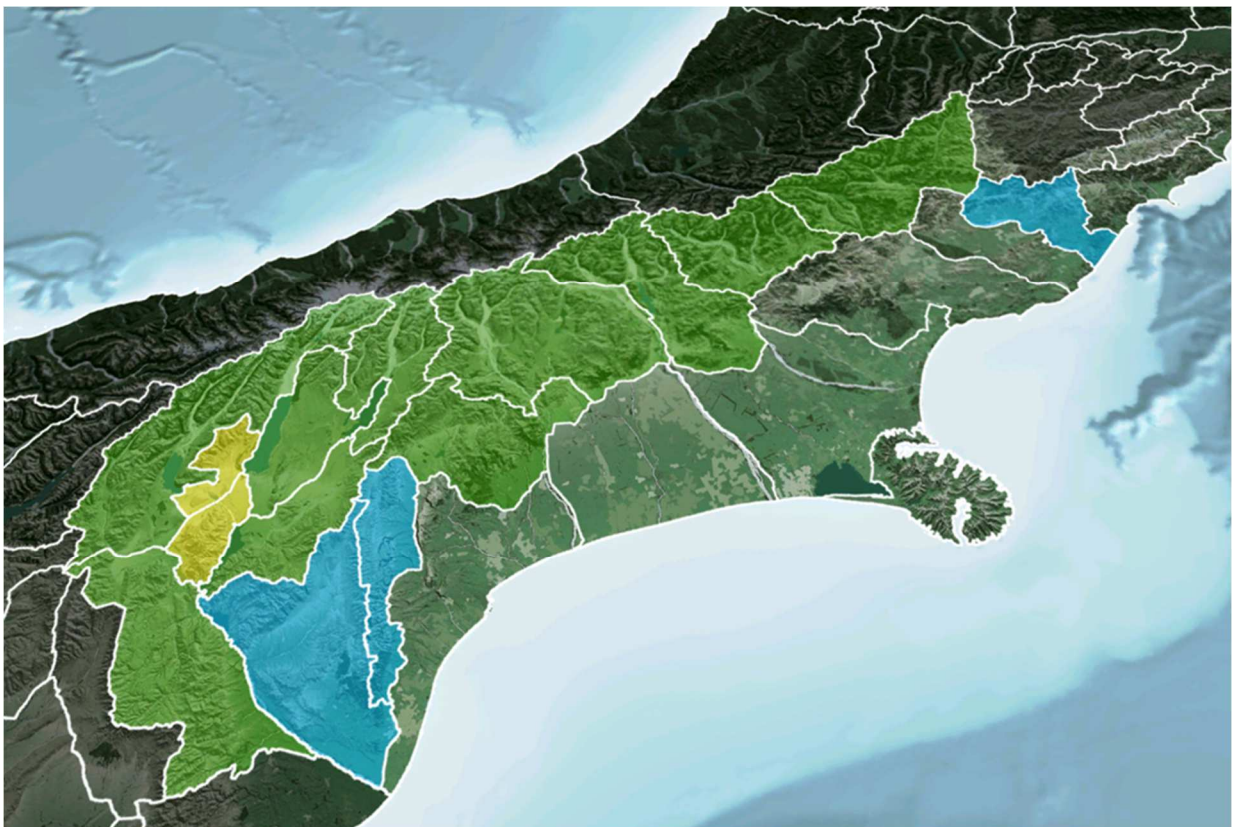
(2) an indication of the additional steps beyond the ranking to complete a comprehensive weed risk analysis for the 3 to 4 highest ranking species.

Of existing declared pests, African Love Grass has the highest weed risk ranking.

The next step is to inform an analysis of the risk each species posed to the Canterbury region, including:

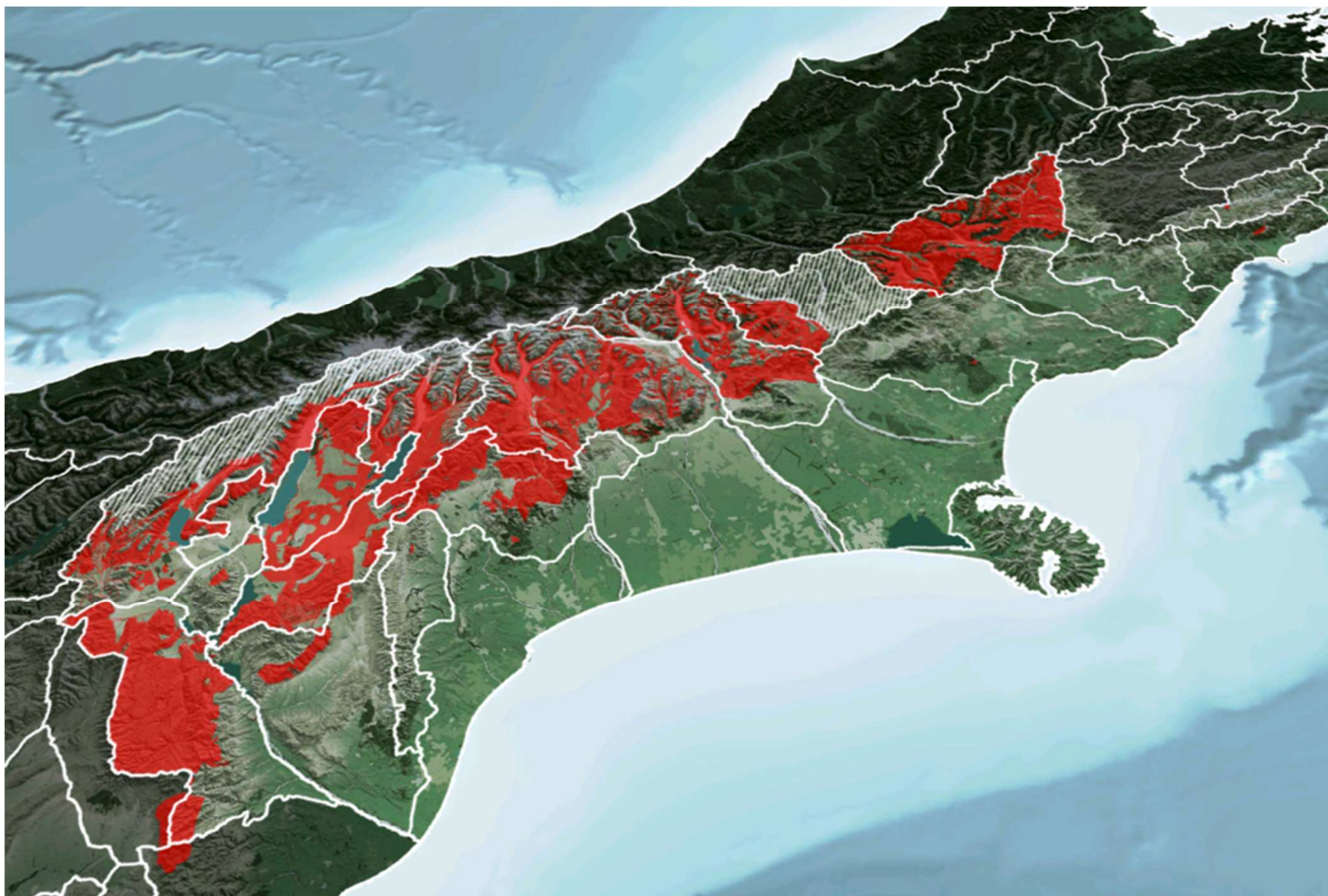
1. the current distribution of each of the species in New Zealand.
2. an account for each of the species regarding their habitats, impacts and dispersal mechanisms and pathways.
3. a climate niche model for African lovegrass *Eragrostis curvula*, identifying the species' potential distribution in Canterbury.

## WILDING CONIFERS



Map of the wilding conifer management units. Green and yellow represent where control is taking place. Yellow denotes management units that became operational this financial year. Blue denotes mgt. units that become operative from 1 July 2021.





The actual areas worked are visible in this map showing where wilding pines have been removed (in red). Over \$15m has been spent to date in Canterbury through the National Wilding Conifer Programme. Volunteer control days have taken place at Twizel, Tekapo and Craigieburn

## **WALLABY**

The application of aerial 1080 impregnated cereal baits commenced in late April and will be completed in late July. This involves 10 properties covering over 23,000 hectares and costing \$0.75m. Other ground control methods are being undertaken all year round.

Compiled by **Laurence Smith**

Principal Advisor - Biosecurity

## AREA BIOSECURITY UPDATE – MAY 2021

**PHRAGMITES** (Eradication Programme) > Four known active sites in greater Christchurch.

These sites have been checked in February 2021 including the surrounding area with one found to be active, (Lake Rua)

Lake Rua (Roto Kohatu reserve), represents the greatest challenge as the phragmites is growing in the lake. ECan are currently working with MPI in a joint venture to fund and control phragmites by excavating and removing the plants and rhizomes. This is a major undertaking currently in the planning stage. Mitigating factors include resource consent to excavate and the requirement to test for potential contaminated soil.

A small scale trial operation is planned for July. The trial will determine if Phragmites is able to be successfully removed without compromising the bank of the lake.

**AFRICAN FEATHER GRASS** (Progressive Containment Programme) > 3 sites in Christchurch City.

These sites have been inspected and only one active plant found.

One site has had plants excavated, along with top-soil, followed by deep burial. The opportunity to undertake this work presented itself due to the sale of the property and planned demolition of the dwelling.

**BONESEED** (Sustained Control Programme) > Boneseed is widespread around coastal Banks Peninsula and Christchurch coastal regions.

Aerial control of a boneseed site at Lushington Bay, Akaroa has been carried out during this reporting period.

Planning for the 2021 - 2022 season is underway including plans for a survey.

**GORSE AND BROOM** (Sustained Control Programme) > Focus on the hill and high country as described in the CRPMP.

Emphasis on boundary rules and keeping clear land clear of Gorse and Broom

The focus is on follow up inspections to ensure work to control gorse and broom has been completed by land occupiers.

**BACHHARIS** (Progressive Containment Programme) Baccharis found predominantly on the Port Hills behind Sumner (East side) around to Richmond Hill. Historic sites checked.

**PURPLE LOOSESTRIFE** (Sustained Control Programme) > A pest that grows on the margins of waterways, which are easily spread and can block streams and drains.

The Purple Loosestrife Programme, while lead by ECan, is a multi-agency effort combining the resources of DOC, CCC and ECan. Known sites have been inspected and controlled in the Tai Tapu area.

**FERAL RABBIT** (Sustained Control Programme) >

**Observations (from contractor) for the Banks Peninsula Rabbit Rating area.**

- March continued with extremely dry weather and ground conditions. In all areas of the peninsula the pasture has been burnt off with farmers having a real concern regarding the extremely high fire risk.
- Property owners are looking at getting the next tree planting season under way and there have been several requests for hare control to be carried prior to planting commencing. Night shooting is the only option for this to be undertaken.
- Rabbit numbers have increased in some areas with the dry weather conditions. RHD usually starts to reduce rabbit numbers around mid-April. It is too early to see the results of this yet.

Contractor undertaking control - fumigating burrows, poisoning and night shooting.

**NASSELLA TUSSOCK** (Sustained Control Programme) > Port Hills and Banks Peninsula

Co-designing a new approach for Nassella Tussock

Three community workshops were held in Amberley on a fortnightly basis to co-design a new approach to Nassella Tussock management. Information from these workshops has been collated and shared with the wider community via our 'Have your say' website.

Community members not involved in the workshops then asked questions, answered surveys, and started discussions on the information, feeding back into the approach for the next workshop. At the end of this process, the approach decided upon was to put a much stronger emphasis on encouraging land occupiers to undertake their grubbing as early as possible in the year.

This will help to free up time for ECan biosecurity staff in the busy end of year period to focus on other important programmes like Chilean Needle Grass. It will provide more flexibility for all parties as to when inspections take place, which in some cases are unable to take place around the compliance dates due to lambing etc.

**FERAL GOATS** (Site Led Programme) Environment Canterbury Biosecurity support the Feral Goat removal project led by the Banks Peninsula Conservation Trust.

Major work programme undertaken in the Mt Evans and Kinloch catchment.

Includes Muster followed by professional hunters to remove stragglers.

Environment Canterbury supporting this programme with site visits to educate domestic goat herd owners of the requirements to identify goats and Boundary Fence standards.

### **OLD MANS BEARD** (Site Led Programme)

ECan supported Old Man's Beard programmes in Govenors Bay, Kaituna Valley, Western Valley Road, Dawbers Road, Little River and Akaroa. ECan provided resources in terms of officer time and engaging contractors to control OMB. Considerable works undertaken Feb, March, April to control Old Man's Beard in the areas listed.

**POSSUM** (Site Led Programme) On Banks Peninsula, the ECan site led possum funding is administered by the Banks Peninsula Conservation Trust as part of the National Predator Free Programme

**WHITE EDGE NIGHTSHADE** (Site Led Programme) White-edge Nightshade is very distinctive. It is a quick growing perennial shrub that can grow up to 5 metres tall containing large woody stems. It has green oak-shaped leaves which have white veins on the upper surface.

Seasonal search and control of White Edged Nightshade was undertaken in April using a combination of Biosecurity Officers and Contractors.

Currently confined to Little Akaloa and Decanter Bay

2018/19 controlled **206** plants, 2019/20 **105** plants, 2020/21 **29** plants controlled.

**BACHHARIS** (Progressive Containment Programme) Baccharis found predominantly on the Port Hills behind Sumner (East side) around to Richmond Hill. Historic sites checked.

Very low plant numbers found this season. 4 plants controlled

### **CATHEDRAL BELLS**

Follow up inspection after control of Cathedral Bells site above Akaroa.

Only known site on Banks Peninsula

Compiled by **Bruce Marshall**  
Biosecurity Team Leader - Central