

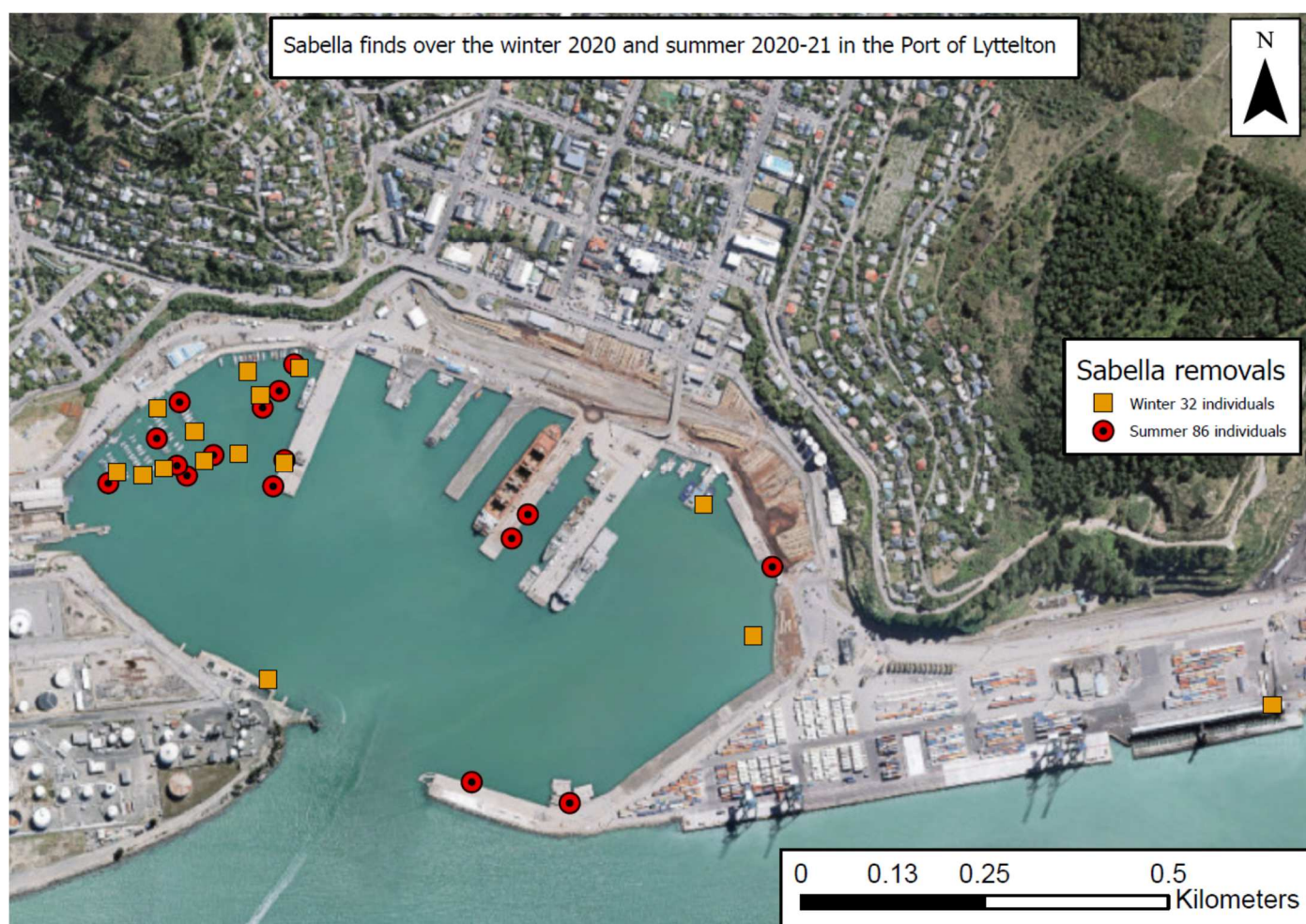
REGIONAL BIOSECURITY UPDATE – MAY 2021

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

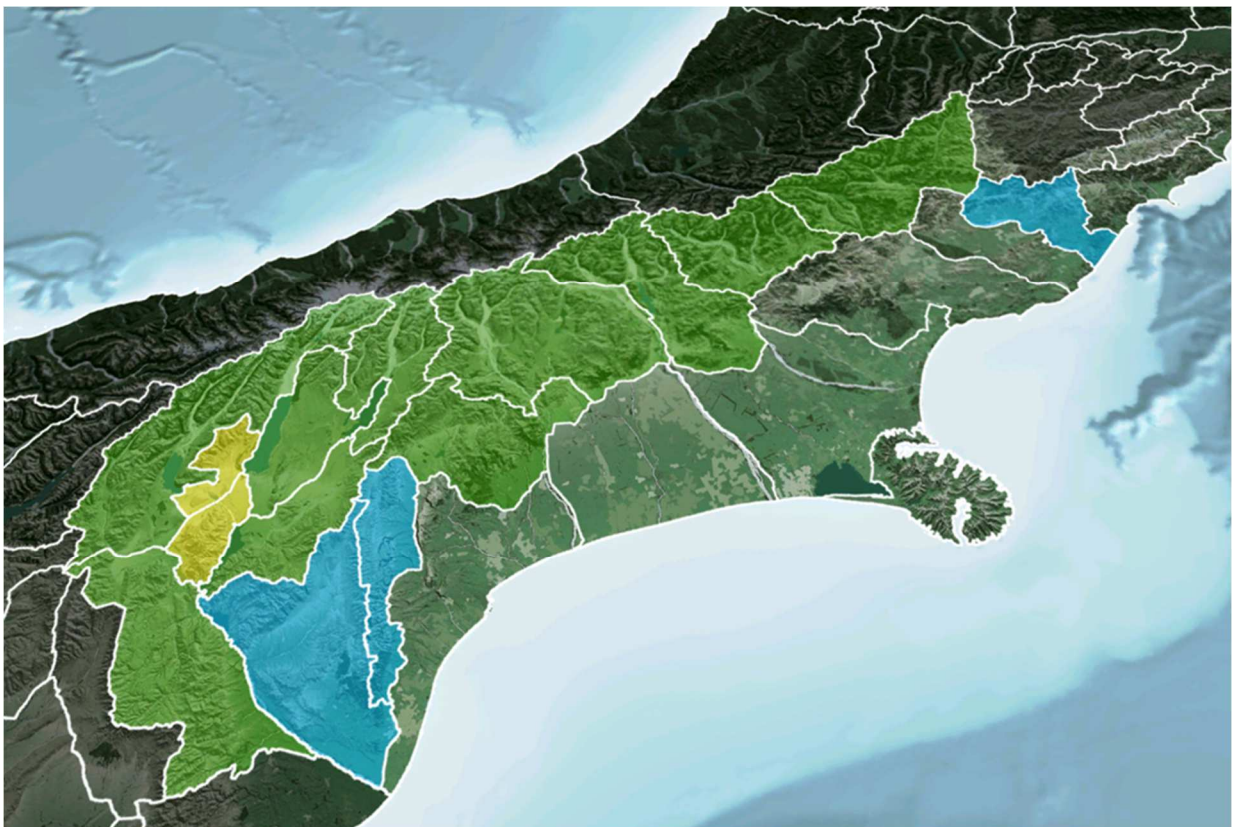
(2) an indication of the additional steps beyond the ranking to complete a comprehensive weed risk analysis for the 3 to 4 highest ranking species.

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

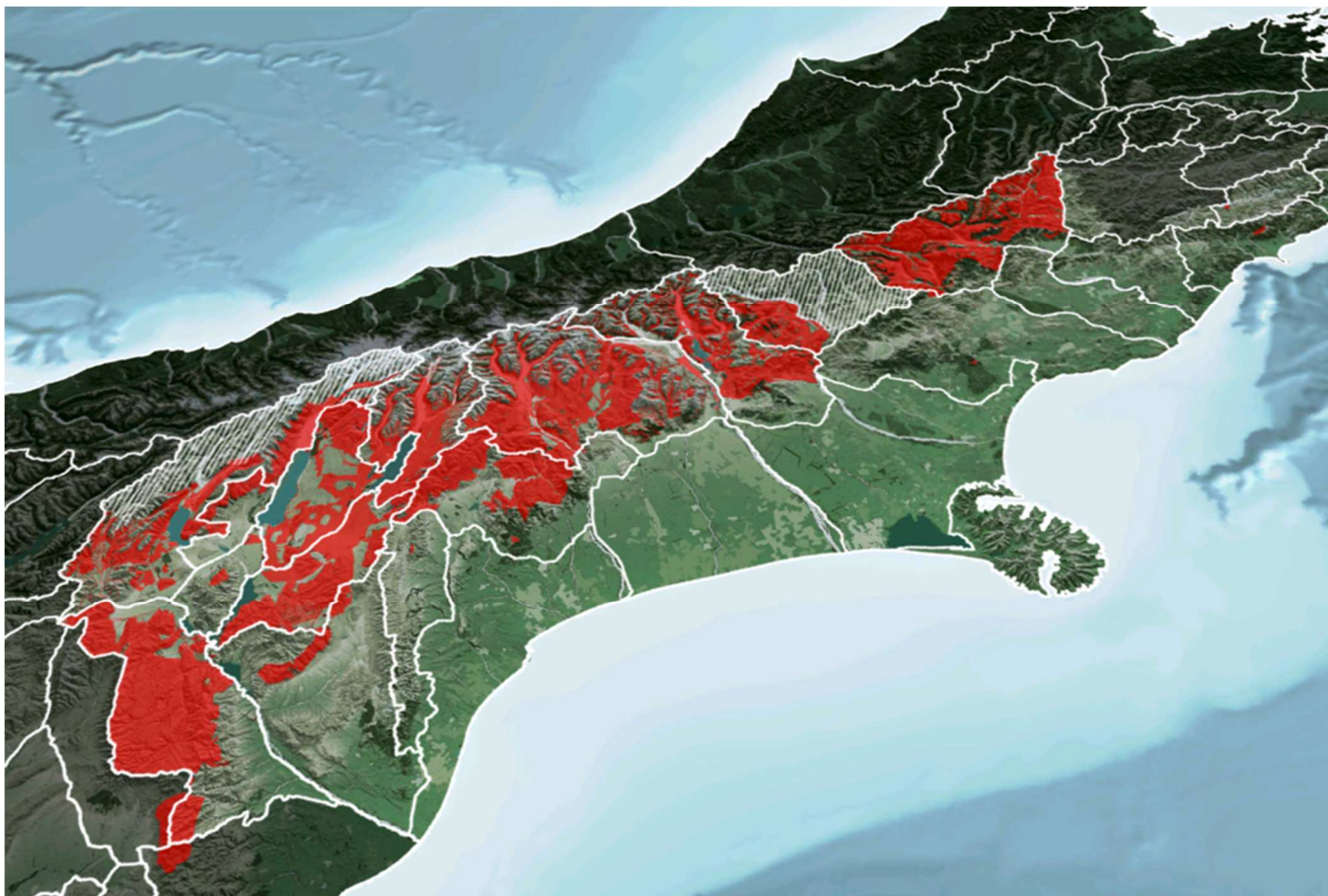
The next step is to inform an analysis of the risk each species posed to the Canterbury region, including:

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

BONESEED (Sustained Control Programme) > 2 known sites, checked and controlled in October 2020

1/ Ashburton River Mouth Hakatere Settlement. 8-10 plants controlled.

2/ Rakia River Mouth South Rakia Huts (checked, nothing found) previously plants found 3 years ago.

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 productive land clear of Gorse and Broom. Responding to complaints from neighbours.

Biosecurity officers' complete inspections of properties to educate first, then follow up with enforcement of rules when required. Education is focussed on best practise.

BUR DAISY (Sustained Control Programme) > No known sites in Mid Canterbury but biosecurity officers will respond to and investigate potential sightings.

COLTSFOOT (Sustained Control Programme) > Classed as a threat to biodiversity as opposed to a production pest.

Central Canterbury region historically concentrated in the upper Waimakariri River and its tributaries. There is also a site at the head of the Harper River.

Currently, known active or recently active sites are being inspected. The steep terrain poses quite a challenge for access. 2019-2020 inspection revealed only a small number of plants found. 5 plants Coral Track site. Inspections currently underway 2021.

DARWINS BARBERRY (Sustained Control Programme) >

Search and control undertaken in the Lake Coleridge township and adjoining Trustpower forestry block.

PHRAGMITES (Eradication Programme)

Two known sites searched. One plant found and controlled at the Wakanui site.

YELLOW BRISTLE GRASS

Biosecurity Officers undertook inspection survey of the rail network, including Ashburton and Springfield to monitor known and potential Yellow Bristle Grass sites.

NASSELLA TUSSOCK (Sustained Control Programme) >

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.

Population Monitoring Program completed. Analysis of transects across properties to gauge Nassella Tussock plant trends.

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