



Help with map features



Frequently asked questions

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How do I map the distribution of a species I am interested in?

On the *Maps & Data* page, select the *Species Search Criteria* tab on the right hand side of the map to select the species you want to display. This search works like a filter, you first define the *Biosecurity Status* of the species you are looking for (*direct to status descriptions*), and whether the species is known to be established in New Zealand or not (*Established Options*). You can also filter by any specific dates or New Zealand locations (*Location Options*) that you want to search in and restrict the search to specific sources of data by de-selecting the databases that are not required. The default search will simply recover all available records from the selected databases.

Once you have defined the filter settings that you want, the *Species* name drop-down box will self-populate with the records we have that fit those criteria. Start typing the **scientific name** of the species into the box (at this stage common names are not able to be searched). As you type, a drop down list of names will appear. Complete typing the name or use your mouse to select the species you are interested in from the list.

If the species you are searching for is not available from the drop down box, check that you have the correct spelling and current scientific name. Our names are consistent with those found in the [World Register of Marine Species](#). Although many native species are included on this website it is possible that there will not be much data on their distribution as the main focus of the Marine Biosecurity Portal is marine species that are not native to New Zealand.

What is shown on the map?

The map will display circles in the locations that the species was recorded. Where several records show in much the same location, a single circle is plotted, with the number of records it represents shown inside. Clicking the edge of a circle will show a list of the records (up to 100) it contains, and clicking on a record in the list will show further detail about the record. Where more than 100 records are represented by a single circle you will be prompted to zoom the map in further to show the distribution at a finer scale, thereby reducing the number of records represented by a single circle.

What data can I view?

Data can only be viewed and exported for one species at a time. On the *Layers* tab, which is minimized in the lower left of your screen, you can switch a range of context and data layers on or off. Click on the tick box beside each layer to make it visible, or deselect the tick box to hide the layer.

Layer	Description
Sample sites	By viewing where samples were taken you can also see where a selected species was not recorded. Note, however, that the sample method is NOT distinguished in this layer, so some sample sites may represent a method that does not capture the species effectively. Treat such absence information as indicative, not definitive. The sample sites from different programmes are displayed using different colours. Sites from the Port Biological Baseline Survey sites are displayed in magenta, Marine High Risk Site Surveillance samples are in blue, and Marine Invasives Taxonomic Service (MITS) sample locations are in red.
Wharves	Wharves and smaller jetties represented in LINZ topographic data can be displayed. They are visible as small black lines on the maps.
Ports	Shipping ports are represented by a blue ship icon. Click on the ship icon to view the name of the port.
Port Extents	The general extent of a port region is demarcated by a rectangle.
Bioregions	For some species in the database there are no reliable point locations available for the observation. Its location is known only from a general area or region. Because of this, presence/absence of a species can also be represented within larger-scale biogeographic regions. Classifications in the bioregional layers indicate that the pest was detected at one or more locations within the bioregion. They do not imply the pest is present throughout the whole bioregion area. Details on the use of bioregions for describing species distributions are contained on the <i>Other Verified Observations of Marine Pests</i> page.
Bathymetry	Shows bathymetric contours around New Zealand (10m - 100m), available as both raster (WMS) and vector (WFS) format.
Base maps	Maps can be displayed using either of two base maps. These are a simple New Zealand coastline map or an Open Street Maps layer.
Extent controls	Instead of readjusting the map's extent you can view the previous five extents viewed on the map, this can allow you view the same extent while searching for different species' distributions.

What do the different *Biosecurity Status*'s mean?

Non-indigenous

Species that are not native to New Zealand biogeographic region, but which are known or suspected to have been introduced as a result of human activities.

Native

Species that occurred within the New Zealand biogeographic region historically and have not been introduced to coastal waters by human activities.

Cryptogenic 1

Species previously recorded from New Zealand whose identity as either native or non-indigenous is ambiguous. This uncertainty may be because the species was spread globally in the era of sailing vessels, prior to scientific investigation so that it is no longer possible to determine their original native distribution. Also included in this category are recently described species that exhibited invasive behaviour in New Zealand, but for which there are no known records outside the New Zealand region.

Cryptogenic 2

Species that have recently been discovered, but for which there is insufficient systematic or biogeographic information to determine whether New Zealand lies within their native range. This category includes previously undescribed species that are new to New Zealand and/or science.

Indeterminate taxa

Specimens that could not be identified to species reliably. This group includes:

- Organisms that were damaged, immature or belonged to species complexes that contain multiple cryptic species and which lacked morphological characteristics necessary for identification, and
- Taxa for which there is insufficient taxonomic or systematic information available to allow identification to species.

How do I download data on a species?

After searching for a species, select *Export results as CSV*. This option is located as the lower right corner of the *Search results* tab. You will then be required to enter an email address, and select *Send results*. An email with a CSV file and data download license agreement will then immediately be sent to you.

How do I zoom in and out on a location?

There are several ways to zoom in or out on the map page:

1. Use your mouse wheel
If your mouse has a wheel you can use it to zoom in and out. One wheel click down zooms out one level, one click up zooms up one level. The zoomed map will be centred on the point indicated by the mouse cursor.
2. Use the zoom bar
The vertical bar in the top left of the map allows you to zoom using a single click, retaining the current centre of the map. Click the "+" on top of the bar to zoom in one level. Click the "-" on the bottom of the bar to zoom out one level. Click an intermediate place on the bar to zoom to that intermediate scale.
3. Shift/Click/Zoom
Press the Shift key and hold the left mouse button down to draw a rectangle around the area you want to zoom to. Release the mouse button to zoom to the specified area.

How do I scroll or pan across the map?

1. Use the scroll arrows
There are four directional scroll arrows located in the top left-hand corner of the map, above the zoom bar. Click on the arrow that points in the direction you want the view to move. For example, click the right-hand button to see further east (which scrolls the map west).
2. Click & drag
Click and hold the left mouse button and drag the map to where you want. It will redraw in the new location.

Clicking on the *Home* icon will re-adjust the map extent so that the entire country is in view.

Where can I read more about the surveillance programmes and data?

Reports associated with the programmes are contained in a Geonetwork metadata catalogue (see the *Publications* page). The catalogue allows you to access a list of relevant reports. Items in the list can be clicked on to provide more detailed information about each one, and can be downloaded directly as PDFs if they are available. Each project's menu allows you to access the *Publications* page. You can retrieve the reports in two ways:

1. Browse the catalogue The *Browse* button in the *Publications* page retrieves a list of all reports in the catalogue and provides a sorted list of titles. You can click on the title to see more detail about the report and optionally download a copy of the report if you wish.
2. Searching reports The *Search* facility on the *Publications* page allows you to enter keywords to retrieve a list of reports that match the keyword criteria. As in the report browser, you can click on the title to see more detail about a report and download a copy.

You can also read about the portal and its data holdings in the open access publication below.

- Seaward, K., Acosta, H., Inglis, G.J., Wood, B., Riding, T., Wilkens, S., Gould, B. (2015) The Marine Biosecurity Porthole – a web-based information system on non-indigenous marine species in New Zealand. *Management of Biological Invasions*, **6**: 177-184. doi: <http://dx.doi.org/10.3391/mbi.2015.6.2.08> [[PDF, 596 KB](#)]