



Landcare Research
Manaaki Whenua



The Role of Citizen Science in Pest Surveillance

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Jon Sullivan, Jerry Cooper, Steve Pawson, Murray Dawson

Biosecurity Bonanza 17th May, 2016

Be in touch: info@naturewatch.org.nz

NZBRN Trust: www.facebook.com/nzbrn/

Twitter - [@NaturewatchNZ](https://twitter.com/NaturewatchNZ)

Blog: www.blog.naturewatch.org.nz

Mobile – sign in to the *iNaturalist* app

Thanks to **MPI**



NatureWatch NZ - NZBRN since 2006

- **largest, longest-running, most versatile citizen bioscience facility in NZ.** Secured ¼ mill observations, 1/3 mill photos, of 10 500 spp, by 4600 observers, of whom 1000 have provided >100 000 crowd-sourced IDs. 1/2 mill devices downloaded 3.5 mill unique page views. Fully interactive & conversational (60 000 comments). Part of global **iNaturalist** open source network (2.7 mill records; map layer in 0.5 bill GBIF records)
- Its fundamental purposes: engage, inform, raise awareness about natural heritage, biosecurity & ecological interactions; **conservation literacy** by supporting community-based projects, enhancing educational & tourism experiences; provide authentic basis for place-making/identity. Aims to demystify science & provide valuable, robust data that can be used to unravel taxonomic & ecological questions.
- Observations can be **anecdotal** or part of **structured monitoring** within projects or places—for plants, fungi, animals, pests, flowers, fish, on land, in freshwater or in the sea. Locations may be hidden or obscured (automatic for red-listed species).

Its multi-functional attributes include:

- Crowd-sourced **IDs & conversations** - 'Fb' of natural history
- **Archived** reliable data **supports Science**; easy comms **with URLs**
- **Place- & Project-based lists, journal - Search & mapping engines**
- **Custom Fields** can be added or created
http://naturewatch.org.nz/pages/extra_fields_nz
- **Surveillance** of pests or target spp & **Alerts**
- **Pictorial Guides** and Simple **keys** for places or taxa
- **CSV bulk up/down load**
- **Photos, video links, sound** recording (copyright options)
- **Apps** are available to support field data entry
http://naturewatch.org.nz/pages/mobile_apps_nz
- Research grade data to Global Bio Information Facility (**GBIF**)

Fun Facts

NatureWatch NZ's interactivity, **conversations**, messaging (anonymous), camera skill & diagnostics training, personal life lists, diaries, dashboard, calendar, journals, Fb, blog, twitter, Google community help forum

Within this buzz important **discoveries** are being made: new native species, **first detections of pests**, new populations of critically rare species, extensions to species distributions, previously **undocumented natural history** such as new behaviours and interactions, and how species distributions, phenology and behaviour are modified by climate change, **pest invasion**, land use and restoration. See top discoveries <http://naturewatch.org.nz/pages/discoveries-nz>

Applications to Biosecurity



- Aid to **Biosecurity Surveillance!**
 - Random (discovery), **Targeted** or **Repeat** surveys/monitoring
- **ID Please** – learn pests by crowd sourcing!
 - See **Project** - <http://naturewatch.org.nz/projects/pest-plants-weeds-of-nz>
- **Quick Assessment** before committing resources
- **Alert & Guides** with Pictures!

NatureWatch NZ · Stemonita fusca, observed by wbnz on February 3, 2013

naturewatch.org.nz/observations/348222

Stemon... Plectan... Heloph... Doris... Nidula... Stemo... Somet... Tambj... Dichro... >> +

NatureWatch NZ Observations Species Projects Places People

jon 0 Dashboard

« Back to wbnz's observations

Stemonita fusca, observed by wbnz on February 3, 2013

Previous Next

Location: 52 back road, oban, stewart Island (Google, OSM)
 Places: Stewart Island
 Lat: -46.8916833034, Lon: 168.1161028147
 Geoprivacy: open

Photos © Wendy Bailey all rights reserved

Description

This was growing on firewood stacked up to weather. First picture is a side view, second is from the top.
 17.2.13 - the slime mould has dried and shrivelled up (see pics 3 and 4).

Tags: stewart island , fungi

Added Feb 7, 2013 10:33 PM NZDT

Comments & Identifications

Wow! That's pretty weird. Was there a spaceship parked nearby?
 Posted by you 8 months ago

More seriously, about how big was it?
 Posted by you 8 months ago

Identification Summary

wbnz's ID: Family Stemonitidaceae [as 'stemonitef']

Your ID: Family Stemonitidaceae [as 'stemonitef'] [Remove](#)

d_kluza agrees

Identotron

Projects

[Invite to project](#)

Data Quality Assessment

Quality grade: **research** [details](#)

Observation © Wendy Bailey
 (cc) by some rights reserved

Is this observation inappropriate, spam, or offensive? [Flag this observation](#)

If you think this observation is inaccurate, please add an ID, participate in the quality assessment above, or describe the inaccuracy in a comment.

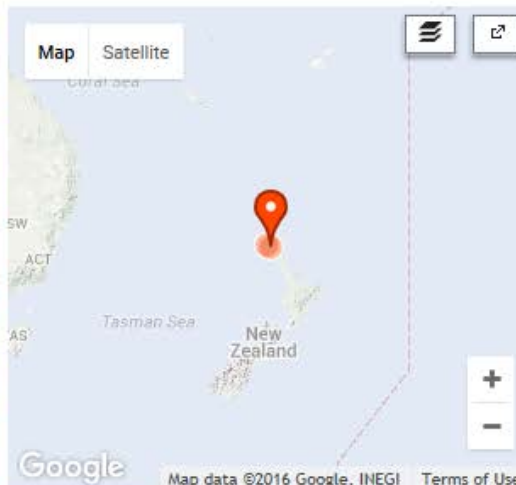
[Like](#) 16 [Send](#)

Discovery

[« tangatawhenua's observations](#)[Previous](#)[Next](#)

Sea Swallow (*Glaucus atlanticus*) · Observed by tangatawhenua · February 11, 2016

☆ 10 faves  Identify  Add to project  Share



▶ [View all 11 photos](#)

Photo © tangatawhenua, some rights reserved

Location: Henderson Bay (Google, OSM)

Places: CoastBlitz Henderson Bay, Aupouri Ecological Region, Aupouri Ecological District, NZ-NO-FN, NI, NZ-NO, NZ, OC, Oceania [More...](#)

Lat -34.761786, *Lon* 173.13183

Geoprivacy: open 

[Hide details](#)



tangatawhenua's ID:

Sea Swallow (*Glaucus atlanticus*)
[Agree?](#)



Community ID:

Sea Swallow (*Glaucus atlanticus*)

About



7 people agree

Identotron

Projects



Test.delete me



iNat Observation of the Day

Added by [tiwane](#) on February 14, 2016 04:41 AM



Beachcombing

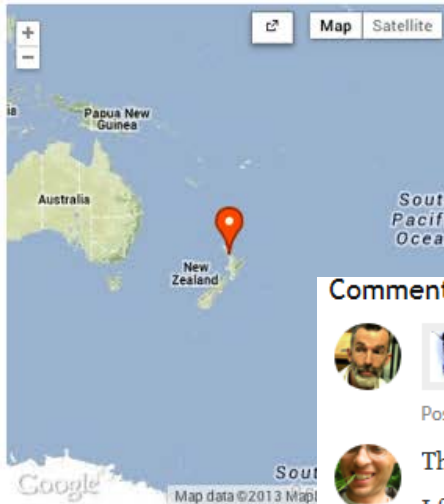
Added by [lisa_bennett](#) on February 12, 2016 12:20 PM

- Observation of the day in iNaturalist
- Over 40 comments

« Back to stho002's observations

Scutellista caerulea, observed by stho002 on April 17, 2013

Previous Next



Identification Summary

sth002's ID: *Scutellista caerulea*
Agree?

Suggest an ID

Find

Species Unknown

Conversations New stories

Comments & Identifications



stephen_thorpe's ID: *Scutellista caerulea*, a member of *Chalcid Wasps* (Superfamily Chalcidoidea)

Posted by [stephen_thorpe](#) about 3 years ago



That's an interesting tiny little thing. What a big head and big eyes.

I found several accounts of this being a useful parasitoid of soft scale insects in crops about the world (e.g., [here](#) and [here](#)). Do you know if this a purposeful biocontrol introduction to New Zealand?

Posted by [jon_sullivan](#) about 3 years ago



I don't see it listed on NZOR at all. Is this another omission or does it have a synonym?

Posted by [jon_sullivan](#) about 3 years ago



See details here: http://species.wikimedia.org/wiki/Category:Scutellista_caerulea_%28New_Zealand%29

Introduced for biocontrol in 1921, but thought to have failed to establish, which is why it isn't on any current lists!

Posted by [stephen_thorpe](#) about 3 years ago



Interesting indeed. Auckland and 2013 are a long way from Nelson and 1921. Perhaps it is more plausible that it's arrived from Australia.

Good spotting!

Posted by [jon_sullivan](#) about 3 years ago



Photos © Stephen Thorpe all rights reserved

Sex: Female
Stage: Adult
Number of individuals: 1

Description

On vegetation by pond.

Vouchered: AMNZ (not accessioned as yet)

Record published: Thorpe, S.E. 2013: *Scutellista caerulea* (Fonscolombe, 1832) (Hyme Pteromalidae), new to New Zealand for the second time! *Biodiversity data journal*, 1: 10.3897/BDJ.1.e959

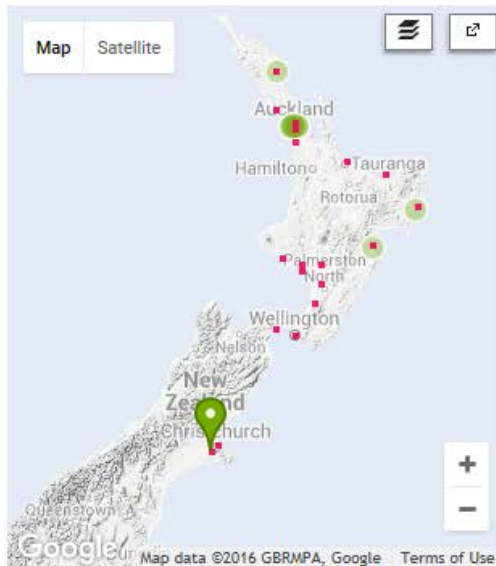
Tags: Not on NZOR
Added: Apr. 17, 2013 04:14 PM NZST

Mignonette vine (*Anredera cordifolia*) · Observed by jon_sullivan · May 10, 2016 · 11:55 AM NZST



► View all 13 photos

Photo © Jon Sullivan, some rights reserved



Location: *Mahoe Reserve, Boundary Roa...* (Google, OSM) [Details](#)

jon_sullivan's ID:  **Mignonette vine** (*Anredera cordifolia*)

Community ID:  **Mignonette vine** (*Anredera cordifolia*)
About

 1 person agrees

Projects

 Pest Plants (weeds) of NZ

 Ecol202 Biodiversity Coast-...

Description

To my surprise, I found two mignonette (Maderia) vines establishing in the northeastern corner of Lincoln's Mahoe Reserve, presumably sourced from a nearby garden. I've never seen this weed in Canterbury before.

I've collected a herbarium specimen.

Tags: *restoration site, weed*

Added: May. 11, 2016 16:57:28 +1200

Ecol202 field trip group name 2016: Staff

Ecol202 field trip: method: casual observation

Plant flower buds: Yes

Plant flowering: Yes

Plant immature fruit/seeds: No

Plant mature fruit/seeds: No

Plant phenology: most common flowering/fruitle reproductive stage: flowers

Count: 2

Weed Range Extensions



[View 25 from May 10, 2016 »](#)

Data Quality Assessment

Quality grade: **Research** [Details](#)

Observation © Jon Sullivan

 some rights reserved

Comments & Identifications



jon_sullivan's ID: **Mignonette vine** (*Anredera cordifolia*)

Posted by jon_sullivan 2 days ago



johnvandenhoeven's ID: **Mignonette vine** (*Anredera cordifolia*)

Posted by johnvandenhoeven 2 days ago



You probably should control this before it spreads.

Posted by johnvandenhoeven 2 days ago



Yes, it's days are numbered. I didn't at the time because I want to make sure none of it survives.

Posted by jon_sullivan 2 days ago



There's only two records of this weed from Canterbury on the **NZ Virtual Herbarium** and one on **NZPCN**. There's still time to stop this weed establishing in Canterbury.

Posted by jon_sullivan 2 days ago

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hanging sedge (*Carex pendula*) · Observed by meurkc · April 26, 2016

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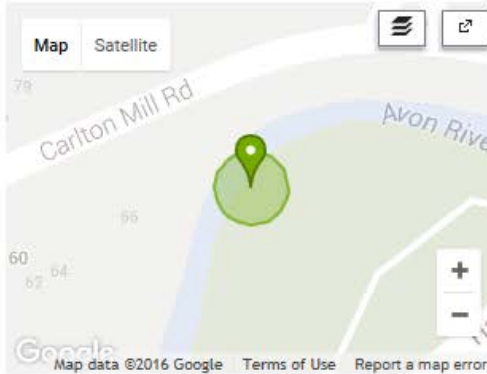


Photo © Colin Meurk, some rights reserved
[Add more photos](#)

Location: Little Hagley Park, Christc... (Google, OSM)
Places: Little Hagley Park - Milbrook Reserve, NZ-CA-CC, Low Plains Ecological District, Canterbury Plains Ecological Region, SI, NZ-CA, NZ, OC, Oceania [More...](#)
Lat -43.521002, **Lon** 172.624298
Accuracy: 10m
Geoprivacy: open [Edit](#)
[Hide details](#)

Your ID: hanging sedge (*Carex pendula*) [Remove](#)

Community ID: hanging sedge (*Carex pendula*) [About](#)

1 person agrees

Identotron

Projects

Pest Plants (weeds) of NZ [*](#)

[View 3 from April 26, 2016 »](#)

Data Quality Assessment

Quality grade: **Research** [Details](#)

Observation © Colin Meurk
 some rights reserved [Edit](#)

Carex pendula
<http://naturewatch.org.nz/observations/3071530>

Description

serious pest plant establishing along the Avon River here. needs to be removed!

Added: May. 01, 2016 20:58:20 +1200

Elevation (m): 15

Plant phenology: most common flowering/fruiting reproductive stage: seed dispersed

[Add/edit more fields](#)

Ease of Reporting

Comments & Identifications

Your ID: hanging sedge (*Carex pendula*) [Remove](#)
Posted by you 15 days ago

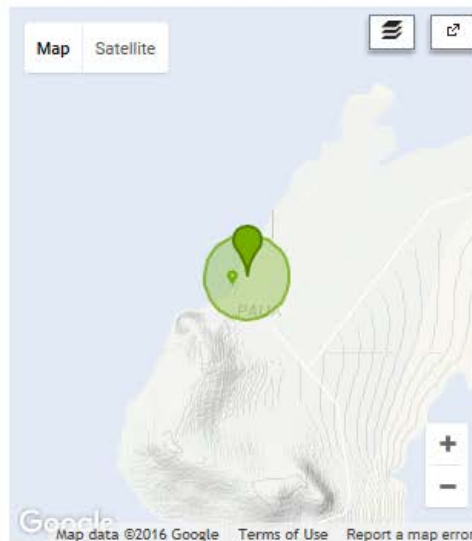
pjd1's ID: hanging sedge (*Carex pendula*)
Posted by pjd1 14 days ago

Grasses (Family Poaceae) · Observed by mike68lusk · April 20, 2016

☆ Add to favorites 📍 Identify + Add to project ➦ Share



Photo © Mike Lusk, some rights reserved



Location: *Parengarenga Harbour, North...* (Google, OSM)
Places: *Te Pahi, Te Pahi Ecological Region, Te Pahi Ecological District, NZ-NO-FN, NI, NZ-NO, NZ, OC, Oceania* [More...](#)
Lat -34.53753, Lon 172.923303
Accuracy: 218m
Geoprivacy: open ⓘ
[Hide details](#)

mike68lusk's ID:
Elytrigia pycnantha, a member of Grasses (Family Poaceae) [Agree?](#)

Community ID:
Grasses (Family Poaceae) [Agree?](#)
About

pjd1's ID:
Townsend's Cord-grass (*Spartina × townsendii*)
1 person agrees
Identotron

Projects

Pest Plants (weeds) of NZ *
Added by *meurkc* on May 12, 2016 04:51 PM

[View 9 from April 20, 2016 »](#)

Data Quality Assessment

Quality grade: **Needs ID** [Details](#)

Observation © Mike Lusk
 some rights reserved

Spartina

<http://naturewatch.org.nz/observations/3149513>

Description

estuarine

Added: May. 11, 2016 20:30:48 +1200
[Add/edit more fields](#)

Comments & Identifications

[mike68lusk's ID: Grasses \(Family Poaceae\) Agree?](#)
Posted by *mike68lusk* 5 days ago

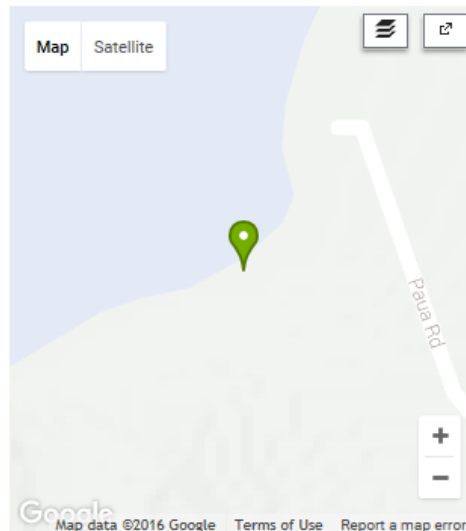
[pjd1's ID: Elytrigia pycnantha - a member of Grasses \(Family Poaceae\) Agree?](#)

Townsend's Cord-grass (*Spartina × townsendii*) · Observed by tangatawhenua · May 13, 2016


☆ Add to favorites 📍 Identify ➕ Add to project ➦ Share




Photo © tangatawhenua, some rights reserved



Location: Paua Northland (Google, OSM)
Places: Te Paki, Te Paki Ecological Region, Te Paki Ecological District, NZ-NO-FN, NI, NZ-NO, NZ, OC, Oceania [More...](#)
Lat -34.538375, Lon 172.92251
Geoprivacy: open ⓘ
[Hide details](#)

 tangatawhenua's ID:
Townsend's Cord-grass (*Spartina × townsendii*) [Agree?](#)

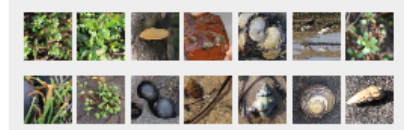
 Community ID:
Townsend's Cord-grass (*Spartina × townsendii*)
[About](#)

👤 1 person agrees

Identotron

Projects

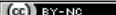
 Intertidal Zone 



[View 26 from May 13, 2016 »](#)

Data Quality Assessment

Quality grade: Research [Details](#)

Observation © tangatawhenua
 BY-NC some rights reserved

Spartina

<http://naturewatch.org.nz/observations/3160850>

Description

*Our assignment for today from @pjd1 was to search and find *Spartina × townsendii* that was spotted lurking at Paua and added to NW yesterday. Packing up the truck with our camera's, garden tools and lunch we headed north and found the location easily.*

As well as growing just in front of the cottage on the right hand side of the channel there is also a mass area of this growing on the left hand side of the channel bordering on the mangroves. The tide was on it's way in but the sand that this was growing in was still damp.

These photos as well as the specimen collected for the herbarium comes from the right hand side of the channel. (Apologies about the photos - I am not usually up this early in the morning taking photos so not used to photographing in this light!)

We also spot checked around Te Pua, Paua and Tangoake but are happy to report that we did not sight any more. However it could be growing at Waipuna which is just around the corner from

here but were not sufficiently equipped to get in there today, but will try within the next month or so.

*On our way out of Paua we got caught in a traffic jam as there was a quad bike in front of us! We were so traumatised that we thought we may have been in Auckland traffic on our way home *LOL**

@rongoa will give a report about the root system that was discovered when a plant specimen was removed for the herbarium collection.

Added: May. 13, 2016 12:56:55 +1200

[Add/edit more fields](#)

Comments & Identifications



tangatawhenua's ID: **Townsend's Cord-grass** (*Spartina × townsendii*) [Agree?](#)

Posted by tangatawhenua 3 days ago



I found a plant that was slightly on its own, but upon digging around the roots I found that the root system was a runner of a mass densely of roots and the plant itself was hard to pull outhad a feeling it was connected under-ground to other runner roots.

Posted by rongoa 3 days ago



Just got the plant out to process and most of the yellow has fallen off - will this be a problem and do you need those as well? If so @rongoa and I can go back and get lots of the seed heads.

Posted by tangatawhenua 3 days ago



I'm in for that so we can do it when we go to Waipuna, unless these may disappear within the next few days and we have to go ASAP.

Posted by rongoa 3 days ago



I am sure @pjd1 will advise us what he would like done :D

Posted by tangatawhenua 3 days ago



And the book was way too small, but a 10 x 2 works nicely :)

Posted by tangatawhenua 3 days ago



Hi - Yes this is *Spartina* - let's call it *S. xtownsendii* for now and when I see a specimen we can finally decide which one it is (*S. xtownsendii* is rather uncommon in New Zealand). What you have done to me sounds fine. Sorry my book was too small - better write another of an appropriate size and weight! Don't worry about the yellow falling off. This grass by the way was introduced to help reclaim estuaries - so its rootstock is a complex intermeshed system that traps sediment - so what 'rongoa' describes is very



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Ladybird Alert!

The pest ladybird, *Harmonia axyridis*, has just been detected in Auckland. It has displaced native ladybirds in Europe and North America. Please look out for it (e.g., eating willow aphids).



Genus *Pittosporum*

Observer [johnsteel](#)
Date May 8, 2016
[Needs ID](#) [View »](#)



inky caps Genus *Coprinus*

Observer [lauradillon89](#)
Date May 16, 2016 04:14 PM NZST
[Needs ID](#) [View »](#)



Ear fungus *Auricularia cornea*

Observer [davidwhyte](#)
Date May 16, 2016
1 ID | [Research Grade](#)
[View »](#)



[2 photos »](#)

Fly Agaric *Amanita muscaria*

Observer [davidwhyte](#)
Date May 16, 2016
1 ID | [Research Grade](#)
[View »](#)



[3 photos »](#)



Targeted Crowd Surveillance

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To report suspected exotic land, freshwater and marine pests, or exotic diseases in plants or animals, call:

0800 80 99 66

Ministry for Primary Industries
Manatū Ahu Matua



All Names

Italian

- Coniglio selvatico
- europeo [Edit](#)

Catalan

- Conill de bosc [Edit](#)

English

- Common Rabbit [Edit](#)
- European Rabbit [Edit](#)

Scientific Names

- Oryctolagus cuniculus [Edit](#)

Spanish

- Conejo europeo [Edit](#)

Portuguese

- Coelho-bravo [Edit](#)

French

- Lapin de Garenne [Edit](#)

German

- Wildkaninchen [Edit](#)

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Guide Colors



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Places 30 of 681

Countries:



- Ordino, AD
- Neuquén, AR
introduced
- Médéa, DZ

[Edit photos »](#)

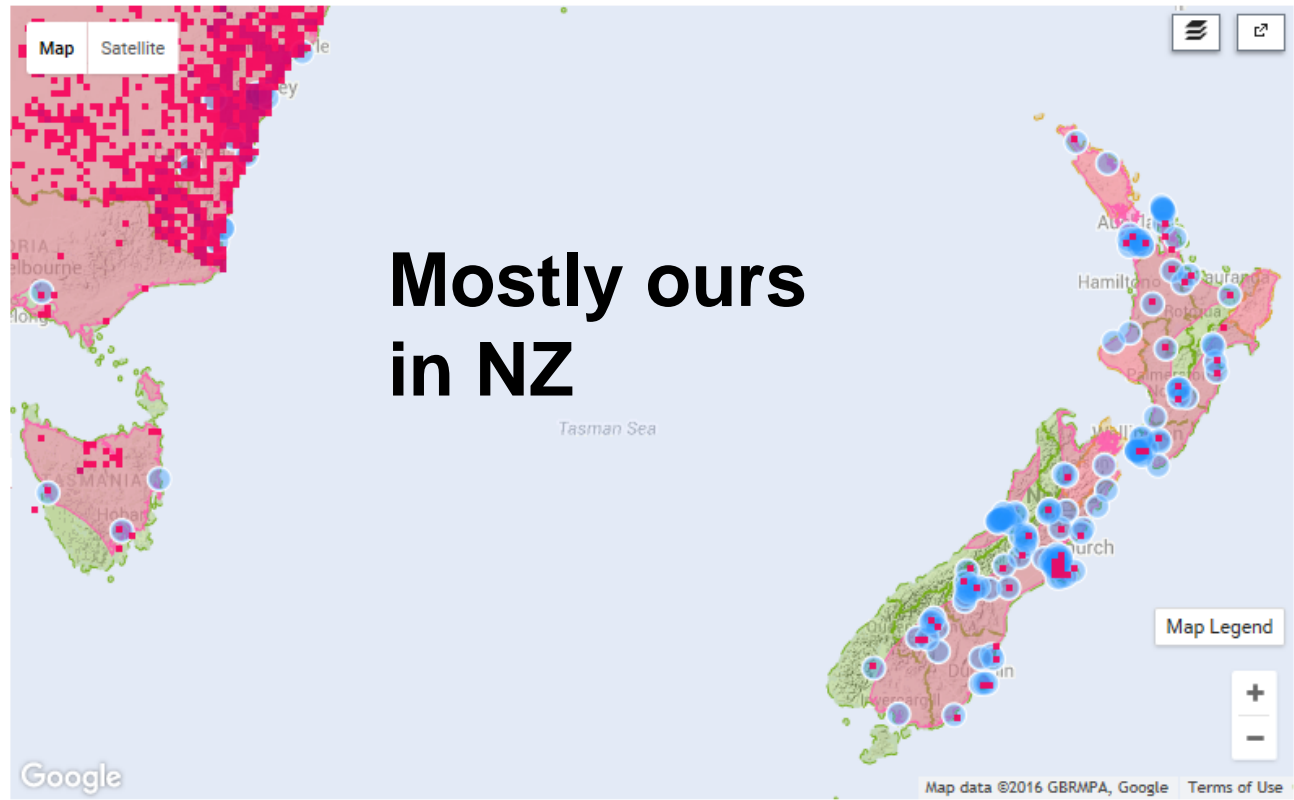
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Mostly ours
in NZ

Rabbit Mapping
blue blobs NWNZ, red dots GBIF

Notifications or Alerts

It can be easy to get lost in the flood of amazing observations. To make sure that you see all the observations you care about, you can **subscribe to places and taxa, and follow people**, so that you are **alerted to all new observations** of these. These alerts will come via email (unless you've turned email notifications off in your Profile) and on your [Dashboard](#).

Look out for the subscribe link on any [Taxon](#) page or [Places](#) page.

The quantity of new observations might seem overwhelming if you're actually just interested in a particular group – perhaps you:

- are studying [echinoderms](#),
- want to share your knowledge of [birds](#),
- are tracking pests like [mustelids](#) or the [Mediterranean fanworm](#), or weeds like [old man's beard](#).
- or just love seeing [slime moulds](#)!

Fortunately, a more targeted approach is possible (think [GCSB](#)).



With NatureWatch, you can subscribe to receive an email-notification when an observation is added from your taxonomic group of interest. (The notifications are aggregated into one daily email, so you are not deluged even if you're following a popular group.)

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Once logged in, click on “Dashboard” in the upper right corner.

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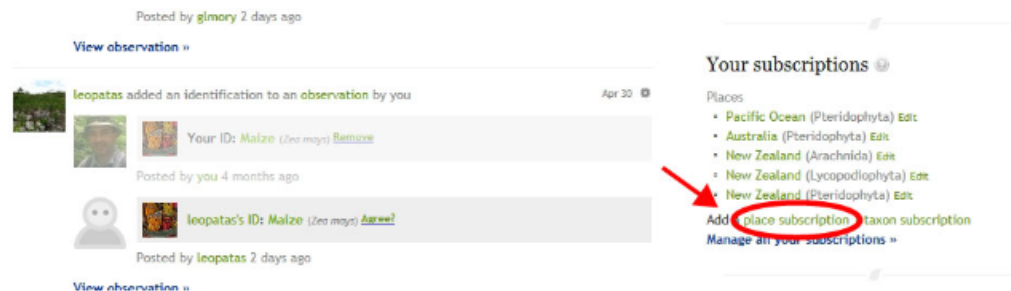
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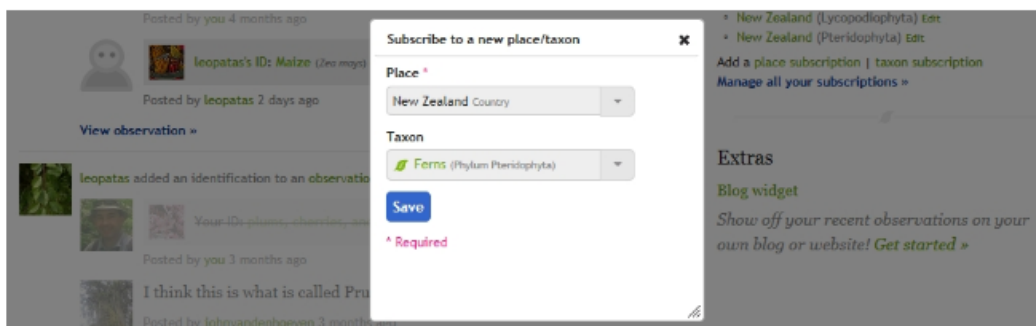
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In your Dashboard, scroll down to “Your subscriptions” (on the right hand side of the page), and select “Add a place subscription”.

(Don’t select “taxon subscription” without seeing more information about it below.)



Select the geographic area (e.g., New Zealand) and group of organisms you’re interested in – the “Place” and “Taxon” – and save.



Your Place of interest doesn’t have to be a country – it can be a region (e.g., Northland) or some other area already defined in NatureWatch.

Your Taxon of interest may be a species, genus, family, or even a phylum.

Rather than a **place subscription**, you can instead make a **taxon subscription**. However, this will return **all** observations made from that taxon from around the world.

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Pest animals in New Zealand

PDF / Print

A guide to pest animals in New Zealand. This guide is restricted to introduced animals that are wild or feral and doesn't include pesky native critters.

See also ...more ↓

All 28

TAGS

- introduced accidentally 7
- introduced as domestic - gone feral 1
- introduced for fur trade 2
- introduced for pest control 1
- introduced for rabbit control 3
- introduced for sport 9
- introduced pets - illegally released 1

TAXONOMY

- Arthropods 3
 - Phylum Arthropoda
- Chordates 25
 - Phylum Chordata

Search Search

Sort Grid Cards



Rainbow Lorikeet¹
Trichoglossus haematodus



Black Rat (Ship Rat)²
Rattus rattus



Brown Rat (Norway Rat)³
Rattus norvegicus



Cat (feral)⁴
Felis catus



Fallow Deer⁵
Dama dama



Ferret⁶
Mustela furo



Goat (feral)⁷
Capra hircus



Hedgehog⁸
Erinaceus europaeus



Mouse⁹
Mus musculus



Possum, Common Brushtail¹⁰
Trichosurus vulpecula



Rabbit¹¹
Oryctolagus cuniculus



Red Deer
Cervus elaphus elaphus



27th New Zealand Fungal Foray & Colloquium: May 2013

Submitted by Bevan Weir on Wed, 30/01/2013 - 12:48pm

Registration and payment due by: 31st March 2013. [Download registration form](#) at the end of this page. The 2013 foray will be based at [Matawai](#), midway between Opotiki and Gisborne, in the East Cape region, from **Sunday 12th May to Saturday 18th May 2013**. The area offers a wide variety of vegetation types, including *Nothofagus*, podocarp and broadleaf forests.

Tags:

forays 2013

[Read more](#)

Report on the 22nd NZ Fungal Foray (Dunedin, 2008)

Submitted by petraw on Wed, 27/02/2013 - 8:15am

THE 22nd NZ FUNGAL FORAY, DUNEDIN, May 2008



NatureWatch - Fungi



Fungi

Observer: eptree
Date: 12 Jun 2013
Place: Te Aroha
Wetlands



Fly Agaric

Observer: jon
Date: 11 Jun 2013
Place: Lincoln
University



Fungi

Observer: eptree
Date: 11 Jun 2013
Place: Mt Te Aroha



Crucibulum laeve

Observer: eptree
Date: 11 Jun 2013
Place: Mt Te Aroha

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Travis Monthly Workday,
Saturday November 21 2015, 9
- 12 ...



Pukeko Stomp, 7 October 2015

... and launch Saturday 3
October 11-12 30 am. Distance 5km Meet end
of Wetlands Grove off Anzac Drive (Bexley)
Launching Christchurch 360 Trail by exploring
the red [...]

*Christchurch 360 Trail Launch,
October 3 - 4 2015*



*Trees For Canterbury Public
Planting Day, September 19,
2015*

NatureWatch Recent Posts

NatureWatchNZ



[View more observations from Travis Wetland Nature Heritage Park on NatureWatch NZ »](#)

Using **NatureWatchNZ** as a Template for Restoration Monitoring

The screenshot shows the NatureWatchNZ project interface. At the top left, there's a navigation link for « Projects » and a project title "Ecological Restoration - Plant Monitoring" with a small image of a landscape. On the top right, there's an "Edit project" link and a prominent blue button that says "Add observations to this project". Below the title, there's a map area with a "Map" and "Satellite" toggle. The map shows a coastal area with several green location pins. To the right of the map, there's a sidebar with navigation options: "Observations / Map" (103 observations), "Checklist" (22 taxa observed), "Journal", "Members" (2 members), "Stats", "Invite observations", and "Add from your observations" (with a link to "Download template for use in the bulk uploader"). Below the map, there's a "Recent observations" section with a "View all »" link. It lists three observations: 1. "Marble Leaf *Carpodetus serratus*" by observer "savvy" on April 30, 2015, at "Kaitawa Reserve, Paraparaumu (Google, OSM)". 2. "Mikimiki *Coprosma virescens*" by observer "meurkc" on February 27, 2015, at "Otipua Wetland, Timaru (Google, OSM)". 3. "Makaka *Plagianthus divaricatus*". Each observation includes a small photo of the plant. At the bottom right, there's an "About" section with text: "MEASURING plant status, performance and growth in restoration projects or plantings. Each of the parameters relates to an individual plant (individual identifier) within a plot (plot identifier); or when an individual is NOT specified, then overall species cover (cover class) is entered for the plot/sample. WHOLE OF SITE data is included in 'comments' for individual records that ...more ↓". Below this is a social media sharing bar with "Like", "Share", and "0" counts, and a note: "meurkc created this project on April 07, 2013. Is this inappropriate, spam, or offensive? Add a flag".



Five Minute Bird...

CUSTOM FIELDS – for bird monitoring

What did you see? ID Please? Name of the

Species unknown

Was it captive / cultivated?

When did you see it?

(GMT+12:00) Auckland
e.g. "2015-05-09 23:37:56", yesterday at 4pm

Description

Tags *Comma-separated, please*

Change geoprivacy

Fields for 5MBC: Five Minute Bird Counts

Five minute bird count method *

Was this observation part of

Simple temperature
Which of the following best describes the temperature at your site?

Simple wind
Which of the following best matches the wind conditions at your site?

Noise
Noise can make it harder to detect some species (e.g. hear bird calls).

Direct sunshine in 5 minutes
To the nearest minute, how much of your five minutes of sampling was the sun not blocked by cloud?

Precipitation type

Precipitation intensity

Minimum number of individuals SEEN
Whether you also heard them or not, you need to have seen them to count them here. The minimum, if you made multiple sightings, is the fewest individuals that could have been present.

Number of individuals SEEN
Whether you also heard them or not, you need to have seen them to count them here. If you made multiple sightings of potentially the same individuals, estimate here the most likely number of individuals present.

Maximum number of individuals SEEN
Whether you also heard them or not, you need to have seen them to count them here. If you made multiple sightings, this is the maximum number of individuals you could have seen had each sighting been a different individual.

Minimum number of individuals HEARD ONLY
Your best lower estimate of the number of birds you ONLY HEARD.

Number of individuals HEARD ONLY
Your best estimate of the number of birds you ONLY HEARD.

Maximum number of individuals HEARD ONLY
Your best upper estimate of the number of birds you ONLY HEARD.



NatureWatchNZ
as a Restoration
Monitoring Template

Surveillance as & for Citizen Science

Problems:

Reliability; Presence/Absence; Sampling intensity/bias;
Revelation - damage NZ clean-green reputation

Solutions:

Photo verification; Custom fields for P/A can be mandatory within Projects; Entice to record ubiquitous/common/rare Target sp; Structure as rapid inventory or rigorously designed monitoring surveys; iNaturalist r-analysis package; Gaming; Trust building

Results:

10 000 eyes now with national coverage, potential of many more; Rapid interception of new incursions; Robust data; Fun & engaging & educated public; Honest relationship with trading partners

Summary ... & that's not all ...

NatureWatch NZ is an empowering **'one-stop shop'** for bio-discovery, learning; providing templates for **surveillance**, non-destructive sampling, monitoring & recording performance of restoration projects

http://naturewatch.org.nz/pages/monitoring_nature_guide_nz

Embed NatureWatch functionality in other websites/apps **via the API**

Help is always a click away – see the extensive help button at bottom of each page



matai (*Prumnopitys taxifolia*) observed by meurkc on February 27, 2015

Edit

Add to project

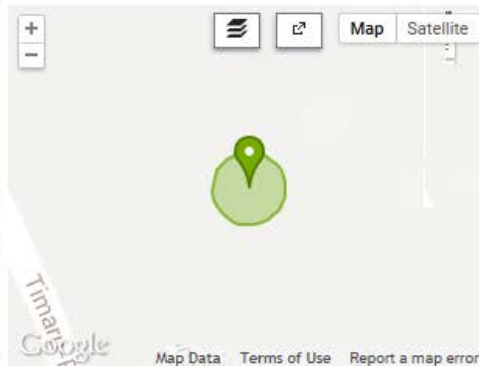
Copy

Delete



Photo © Colin, some rights reserved

[Add more photos](#)



Location: Otipua wetlands, Timaru (Google, OSM)

Places: Timaru, Canterbury, NZ [More...](#)

Lat -44.421628, Lon 171.241916

Accuracy: 10m

Geoprivacy: open [Edit](#)

Identification Summary



Your ID:

Matai (*Prumnopitys taxifolia*)

[Remove](#)



Community ID:

Matai (*Prumnopitys taxifolia*)

[About](#)



2 people agree

Need ID help?

[Add to ID Please](#)

Identotron

Projects



Biological Restora...

[remove](#)



Biological Restora...

[remove](#)



[View 19 from February 27, 2015](#)

Description

planted about 2000 in shelter of cabbage trees; struggling in tall grass not yet fully shaded out.

Added: Mar. 03, 2015 00:14:49 +1300

Elevation (m): 2

Monitoring - Height (m): 1.6

Monitoring - Spread Max (m): 0.7

[Add/edit more fields](#)

Comments & Identifications



Your ID: Matai (*Prumnopitys taxifolia*) [Remove](#)

Posted by you 2 months ago



glenn-nz's ID: Matai (*Prumnopitys taxifolia*)

Posted by glenn-nz 2 months ago



maxbuxton's ID: Matai (*Prumnopitys taxifolia*)

Data Quality Assessment

Community-supported ID?

Yes

2 people agree

2014



Plant ed	Place	Specie s	Field ID	Individ ual ID	Sampl e Area (m2)	Condit ion	Height (m)	Max Spread (m)	Min Spread (m)	Basal Diam (cm)	DBH (cm)	Height Growt h/An (m)	Max Spread Growt h/An (m)	Min Spread Growt h/An (m)	Basal Diam Growt h/An (cm)
TRUE	Travis Wetland, Chrischurc h	Matai	Milleniu mForest Upper	Pt01	1250	All live/heal thy"	2.5	1.25	1.15	3	2	0.161	0.082	0.075	0.164
TRUE	Travis Wetland, Chrischurc h	Matai	Milleniu mForest Upper	Pt02		All live/heal thy"	1.85	1.25	1.2	2	1.5	0.114	0.082	0.079	0.093
TRUE	Travis Wetland, Chrischurc h	Matai	Milleniu mForest Upper	Pt03		All live/heal thy"	2.7	1.85	1.4	3	2	0.175	0.125	0.093	0.164
TRUE	Travis Wetland, Chrischurc h	Matai	Milleniu mForest Upper	Pt04		All live/heal thy"	2.6	2	1.85	3	2	0.168	0.136	0.125	0.164
TRUE	Travis Wetland, Chrischurc h	Matai	Milleniu mForest Upper	Pt05		All live/heal thy"	2.8	1.6	1.4	2	1.5	0.182	0.107	0.093	0.093
TRUE	Travis Wetland, Christchurc h	Matai	Milleniu mForest Upper	Pt01-05	2500	All live/heal thy"	0.25	0.1	0.1	0.7					
TRUE	Otipua wetlands, Timaru	Matai	Otipua	Pt01		All live/heal thy"	1.6	0.7							

Baseline 2000

Aver- Age	0.16	0.106	0.093	0.136
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