

About NZBRN

The *NZ Biodiversity Recording System* is being developed and administered by a team at Landcare Research and Lincoln University together with an informal stakeholder steering group from across New Zealand. The project is funded by TFBIS¹ and is currently hosted at Landcare Research although will remain independent. Data will support New Zealand's GBIF² node. The *Artportalen* template for NZBRN was supplied to us *gratis* by the Swedish Species Information Centre. The adaptation to New Zealand requirements has been carried out during 2006 and a test system accommodating plant, bird and fungal data entry has been operating from the end of that year.

The aim of NZBRN is to provide a secure and robust means of storing, retrieving and displaying natural history observations from all over New Zealand. In particular we seek information that is not otherwise recorded in formal institutional databases, and we anticipate receiving input from the interested public, school, scout and naturalist groups, researchers and (retired?) scientists. Eventually plants, algae, birds, fungi, invertebrates, and other vertebrate animals will be recordable. Indigenous and introduced species, including weeds and pests, can all be recorded. The underlying purpose is to engage the wider public - and young people in particular - in the fascinating and rewarding activity of observing and getting to know living nature as opposed to virtual reality. We hope this may help to raise overall awareness of and protectiveness towards our unique and vulnerable biodiversity.

Instructions for NZBRN

Click on bird icon on webpage www.nzbrn.org.nz

At any time you can click on the icon in the very top left hand corner of current page and you will be taken back to home page - where you can enter a different portal.

Familiarity and dexterity with the whole system takes a while to develop; as with everything, practice makes perfect!

If you have any problems please contact fuglestadm@landcareresearch.co.nz, or meurkc@landcareresearch.co.nz.

¹ Terrestrial and Freshwater Biodiversity Information Systems

² Global Biodiversity Information Facility

Bird Records

STARTING UP

- Click on **bird** icon
- the following items are active without signing up or logging in:
 - **Species List** shows all NZ bird taxa according to specified threat status
 - **Statistics** at present shows only **My entry dates**
 - **Manual** is available but under revision.
 - **Today's Diary** lists weather conditions and other notes recorded on the listed dates and locations – with a link to the bird **record**.
 - **Show records** enables anyone to view all records according to criteria that you specify (see below for more detail).

Sign Up: for first time *reporters*³

Enter name, address, email, etc. You can specify which information you want to be available to other users. When you have submitted the information you will immediately receive an email giving you your password and the username you chose.

If you do not receive the email within 10 minutes contact the system administrator: Fuglestadm@LancareResearch.co.nz. Please do not attempt to register again until you find out whether your first attempt succeeded but the email did not get to you for any reason. It may just be delayed or the email address you entered while registering had an error in it; computers are very fussy!

Now you can **Login**.

Once you are logged in it is recommended that you change your password to something more friendly by clicking on the Personal tab and at the top of the form click on 'Change password' link and follow the instructions.

Note: you will need to sign up separately for each portal.

Login: username, password.

Personal enables you to view and change your **personal details** and the designation of who you wish to view your data. You can also change your email address and password. 'My bird diary', 'Report statistics', 'Co-observer' (delete or add), 'Report settings', 'Purpose' (for reporting), and 'My Discoveries' (rare bird records) are summarised or can be edited here.

Contact enables you to locate other reporters that have allowed their information to be made public.

Show Records/Geographic Extent shows only named sites, not bird locations

³ Someone who makes observations and enters records on this system.

Species List shows all NZ bird taxa according to specified threat status
Statistics shows nothing at present (apart from 'My entry dates')
Manual is available but under revision.

ENTERING RECORDS

Create Record: you have a choice of recording at an existing site name (**My Site** or **Common Site**) or establishing a **New Site**.

Existing sites

If it is not a new site go to **Sites**, select a site name from drop down list in the **My Sites** or **Search Common Sites** search boxes. Click on chosen site name. You can add these **common sites** to **my sites**.

Then **Enter Record** and a site record form will appear with the selected site name already entered. A drop down list of standard bird names at top left of form allows you to pick a name which automatically is entered in the 'species name' field.⁴

You may optionally indicate a **Co-observer** (who must already be a registered reporter), the **Purpose** of the records (e.g. school monitoring, 5-minute bird count), and detailed **Diary** information about weather conditions etc. Finally enter the observation data into the site record form (takes up to 10 records at a time). The tick boxes at right of entry table⁵ allow you to specifically indicate absent records, uncertain identifications, records reported to you indirectly, escapees, hidden records (only visible to the reporter) or protect precise location (records displayed to the public only as 5 km grid squares).

You can **Change Settings** at top right of table to customise the entry form by including or hiding fields.

Note: if you don't change the date then the record will be made for the day you entered the data, NOT the day of the observation. When adding records to subsequent lines all dates will be automatically duplicated.

Once data is entered click **Save** at bottom right of entry form. Be very careful **not to accidentally hit the Reset tab** or you will lose the data just entered!

As an alternative to the entry form, up to 50 records can be pasted from a spreadsheet into the **Excel Import** space. You must first down-load a customised spreadsheet which can be used at any time to enter data, such as on a field laptop, in the required format. There

⁴ If you are not sure of the standard name then click on the 'species list' tab at bottom left. This will give the option of specifying where in the name your letters apply. E.g., type in 'stilt' and all stilt names will appear for selection.

⁵ The original Swedish system is based around an extensive network of parish and district data controllers who continually vet data, especially rare or novel records. There is provision for submitting such uncertain and significant records to a committee, however, here we will wait and see what volume of entries and interest we receive before contemplating setting up such a network. Evidence overseas suggests erroneous records make up an insignificant proportion of total records. We will however eventually check on outlying records to ensure authentication of these critical entries.

separate pages on the spreadsheet to provide precisely formatted variables to enter in each field. You can later paste the record into the Excel Import space.

Note: the only mandatory fields are species name, date and site name and/or grid reference.

New Sites

If you choose **New Site**, a NZ map will appear and you can zoom in by clicking on progressively smaller red squares (on the right of map), then pointing/clicking (with cursor) to position on the map⁶. Sometimes you will have to go down one zoom level at a time to ensure good registration between levels.

At the top two zoom levels you will see green dots across the map and by ticking the **Display site names** box each dot will be named (label is to upper right of green dots) - based on place names in the NZ Gazetteer and any other sites (orange dots) that you have created in the past. Click on one of these place names if it corresponds to the site from which you wish to enter observations. You can also **List site names** (10 closest sites).

or ...

you can create a **New Site** name. Click on the 'swallow' symbol and then point/click on the (highest zoom) map with the cursor to the precise location of your **New Site**. Coastlines, named roads, rivers and 10 m contours should enable locating easily within 100 m. It will however be useful to have with you a standard NZ road map or topo map to help navigate through the more sparsely roaded parts of the country.

You will see the coordinates displayed below the map⁷ and these, plus the Administrative Region and District, and the Ecological District and the 10 km Grid Square ID, are displayed below. You have another opportunity to consider using an existing name by activating the **Would you like to use any of the nearby sites listed** box. A list of the 10 nearest sites and their distance (from your orange dot) is provided or you can choose a 10 km grid square where the precise location is not known (this feature together with a 1 km grid square ID is still under development).

You can also enter 7-figure coordinates in the appropriate boxes, click on the coordinate system you are using and then click on **Save** and the conversion to NZTM will be made.

Now **Enter Record** and the site record form will appear.

You may then, as above, indicate a **Co-observer**, the **Purpose**, **Diary** entry, and finally **Enter** the data to a table (takes up to 10 records at a time) or **Excel Import** (paste in up to 50 records from a spreadsheet). You can **Change Settings** and tick the right hand boxes as appropriate.

⁶ You can slide the map by pointing near an edge of the map which then becomes the new centre.

⁷ The given coordinates are a new generation coordinate system [NZTM - transmercator], but the standard metric grid can be entered and will be automatically converted.

Once data is entered click **Save** at bottom right. [see above for more detail]

DISPLAYING RECORDS

Show Records allows you to display information about **Species** (enter species name which can be found in species list through series of filters), as constrained by indicating the time **Period**, the **Geographic Extent** (set by the scale and position of the map), the **Region** (drop down lists of administrative and ecological districts as well as site names allow retrieval of bird lists from a Scenic Reserve or other named site, for a given time period, if entered in that way), or **Other Settings** (condition, age, gender, activity, status filters, etc.). You only have to enter one of these criteria and it need not be 'species'⁸. You can then display this data (**Present Records**) as record lists, distribution maps, histograms, species lists, or as tables suitable for export to an Excel spreadsheet – where you can order, filter and extract whatever subset of data you want.

To edit your own records, click on **Administrate**; click on the tick box for the record you wish to edit; click the **Edit** button (lower right). Make the changes and **Save**.

When finished, **Logout**.

⁸ You can change (delete) the search criteria (displayed on the top line) by clicking on species, period, etc. This will remove the clicked criterion. You can thus remove any of the constraints by clicking the search display (e.g. if you click on the species name it will disappear and allow you to search all species within the period, geographic and other constraints as still displayed or specified). If you click **new search** (to right of search display) it will eliminate all existing search criteria and you will have to start again. You have to have at least one search criterion before the display will be active.

Fungi Records

STARTING UP

Click on **fungi** icon

Sign Up: for first time *reporters*⁹

Enter name, address, email, etc. You can specify which information you want to be available to other users. When you have submitted the information you will immediately receive an email giving you your password and the username you chose.

If you do not receive the email within 10 minutes contact the system administrator: Fuglestadm@LancareResearch.co.nz. Please do not attempt to register again until you find out whether your first attempt succeeded but the email did not get to you for any reason. It may just be delayed or the email address you entered while registering had an error in it; computers are very fussy!

Now you can **Login**.

Once you are logged in it is recommended that you change your password to something more friendly by clicking on the Personal tab and at the top of the form click on 'Change password' link and follow the instructions.

Statistics provides a running total of records and reporters

Species List provides a full list of plant scientific names (including mosses and liverworts) and lichens. The Fungal portal shows the equivalent fungal names.

Show Records enables anyone to view all records according to criteria that you specify.

Login: username, password.

'Personal tab' enables you to view and change various personal settings. These are view or change your personal details, co-observers (they must also be registered with the system), report settings and purposes (see graphic below).

Main portal	Start	Create record	Show records	Species list	Statistics	Personal	Instructions	Logout
Personal information	My sites	My co-observers	Report settings	My purposes				

⁹ Someone who makes observations and enters records on this system.

CREATING RECORDS

Click on ‘**Create record**’ tab at the top and you will see the following ‘Observation wizard’:

The screenshot shows the 'Create record' page with a navigation bar at the top. The 'Create record' tab is highlighted with a red circle. Below the navigation bar, there is a 'Query bar' indicated by a yellow box. The main content area is titled 'HOW TO RECORD AN OBSERVATION' and features an 'OBSERVATION WIZARD' bar with four steps: 1. Select purpose, 2. Co-observer, 3. Select location, and 4. Record entries. An 'Excel upload' button is also present. A yellow box labeled '<- wizard bar' points to this wizard bar. Below the wizard bar, there is text explaining the two ways to record an observation (via a form or via a text file) and instructions on how to handle co-ordinates, co-observers, and purposes.

This ‘wizard bar’ will walk you through the process of recording your observations. As you select various criteria they will appear at the top of this wizard in the ‘query bar’ (noted above).

All of these steps are optional except that of a location, and even the location can be chosen at the ‘Record entries’ form (step 4), not necessarily in the ‘Select location’ step (step 3).

Going through the wizard steps, your first option is to choose a Purpose (step 1). The purposes are composed of common and personal purposes. The personal purposes must have already been created under the Personal tab option. If you have not created any purposes previously then there will be none to choose from at this point.

If you want to can choose a co-observer (step 2. This person must be someone already registered in the system).

When you get to the ‘Select location’ step (see below graphic) you have a choice of using any personal sites you may have chosen up to this point, searching for a site, choosing or creating a new site from a dynamic map. If you wish you can use just the grid references (Easting and Northing) of the location. The system uses the NZTM (New Zealand Trans

Mercator) system but will convert your NZMG (New Zealand Map Grid) Easting and Northing for you.

MY SITES

OBSERVATION WIZARD

1. Select purpose 2. Co-observer 3. Select location 4. Record entries Excel upload

You do have personal sites.
Your location choices are:

- Choose from public sites at the very bottom
- Use dynamic map to locate site or create a new personal site (new site will be used for this observation and can be used for future observations)
- Choose from your personal sites below

Find or create a site: Find site using map >>> <- Use map to find/create site

- Province - - Select site - <- Personal sites

SEARCH COMMON SITE

Begins with Site name SEARCH >>> <- Search for common site

Search only among sites in my report area.

If you choose **New Site** a NZ map will appear and you can zoom down by clicking on progressively smaller red squares (on the right of map), then pointing/clicking (with cursor) to position on the map¹⁰. It will be useful to have with you a standard NZ road map or topo map to help navigate through the more sparsely roaded parts of the country.

You will see green dots across the map on the top two zoom levels, and by ticking the **Display site names** box all the dots will be labelled (based on place names in the NZ Gazetteer and any others that you have created in the past).

or ...

you can create a **New Site** name. At the 4th or 5th (highest) zoom level, Click on the 'flower' symbol (see image below) and point/click on the map with the cursor to the precise location of your **New Site**. You will see these coordinates displayed below the map¹¹ and these, plus the Administrative Region and District, and the Ecological District and the 10 km Grid Square ID, are displayed below. You will also see the coordinates displayed in the Easting and Northing text boxes to the right of the map. If you need to 'tweak' the new locations position you can do so by modifying the Easting and/or

¹⁰you can slide the map by pointing near an edge of the map which then becomes the new centre.

¹¹the given coordinates are a new generation coordinate system [NZTM], but the standard metric grid can be entered and will be automatically converted.

northing, then click the 'Show' button to move the orange dot (represents the new location you want to create). You have an opportunity to consider using an existing name by activating the **Would you like to use any of the nearby sites listed** box. A list of the 10 nearest sites and their distances to your orange dot is provided or you can choose a 10 km grid square where the precise location is not known (this feature together with a 1 km grid square ID is still under development).

? **1: Select purpose** **2: Co-observer** **3: Select location** **4: Record entries** **Excel upload >>** **OBSERVATION WIZARD**

+ Set the scale by clicking on the scalebar.
+ Click on the map to center the position.
+ Click the **FLOWER** icon to create a new site, mark the site on the map, and enter a site name below.

DISPLAY ON THE MAP

Enter coordinates and click the "View" button to locate the point on the map. The default coordinates use New Zealand Transverse Mercator (NZTM), but should you want you can select NZMG and enter the coordinates as map grid references.

NZTM NZMG

→ Easting

↑ Northing

SHOW >

Quick way to go to a location:
enter Easting and Northing, select coordinate type (NZTM OR NZMG) and then click 'Show' button.

500 m [List site names](#) Display site names

RESULT OF YOUR SELECTION

Easting :	1658160
Northing :	5302980
Region :	Canterbury
District :	Kaikoura
Ecological district :	Kowhai
10KM Grid ID:	9666

Use my selected coordinates only (no placename)

Would you like to use any of the nearby sites listed:
Below is listed the 10 alternate sites within 10000 metres of the location you selected. You can either choose one of the known sites or create a completely new one below.

- Display site names - ▾

Create a new site? :
Enter the name of the new site here. This site will be kept in database as your own personal site and will not be used for anyone else. You can then reuse this site for subsequent observation reports.

SAVE >

Note: before Entering records and losing the map, make a note of the elevation (contours) for subsequent entry.

Once you create new site choose:
1. User coordinates only
2. Select a nearby common site
3. Create a new site

Then finally **Enter Record** into a table (takes up to 10 records at a time) or **Excel Import** (paste in up to 50 records from a spreadsheet). You can **Change Settings** on upper right of table to include or hide fields. The tick boxes at right allow you to specifically indicate absent records, uncertain identification, records reported to you indirectly, hidden records (only visible to the reporter), documented records (from literature), or ‘protect precise location’ of records (displayed only as 5 km grid). Once data is entered click **Save** at bottom right of entry form. Be very careful **not to accidentally hit the Reset tab** or you will lose the data just entered!

The sequence of actions for species entry:

- **Enter Record** – the entry form for 10 records appears; the site name selected/named above appears on the top line and also in the site name field in the form. The current date is automatically entered and so must be changed if observation is different
- **Scroll down** to bottom of page – click on ‘**Species list**’ button. A window appears
- **Type in the first few letters** of the observed genus¹². A list of all species containing those letters appears
- **Scroll down** and select the species wanted. For large genera, such as Coprosma or Hebe, it can save time by typing in whole genus name and first letter of species
- **Close the species list window** and you will be returned to the entry form
- **Fill out the remainder of the fields** as able¹³
- **Add further species** (up to 10)
- **Location:** you can enter in a grid ref directly on this form also, should you choose to put your locations in at this step. The magnifying glass (see graphic below) will allow you to check the location of your entered grid ref by bringing up a map. The red arrow to the left will allow you to convert an NZMG grid ref entry to NZTM

Change settings of recording form						
	Easting (NZTM)	Northing (NZTM)	Accuracy	Elevation (m)	Start date	Stage
→			▼	🔍	2007-08-03	▼
→			▼	🔍		▼
→			▼	🔍		▼
→			▼	🔍		▼
→			▼	🔍		▼

¹² Because of lack of standard plant names we use scientific names, complete with authorities, for the plant and fungal portals. Make sure you don't inadvertently select a name that is part of a hybrid or uses an older authority. We will soon strip these out of the lists. You can find the currently accepted name and authority in www.landcareresearch.co.nz/research/plantsportal.

¹³ Density of plants, % cover by drop down list of standard cover classes, habitat (drop down list), substrate (ditto) (host, at present, must be entered into comments), site name (will already be entered automatically), location accuracy (drop down), start and end dates, stage (drop down), and comments. There are then the tick boxes as already described.

- **Change form settings:** Click on the 'Change settings of recording form' link to modify the record entry form (if you do this after having entered data, all data will be lost)
- **Save:** button at bottom right of form (see graphic above)

DISPLAYING RECORDS

Show Records allows you to display information about **Species**

This also uses a step by step wizard (Report Wizard – see graphic below). This is similar to the 'Observation Wizard'. All of these are optional but you must choose at least one item from one of the steps or when you get to the 'Select report' step all the report styles will be disabled.



Main portal Create record **Show records** Species list Statistics Personal Instructions Logout

Species Time window (period) Geographic extent Region Other Presentation Administrate records

Query bar ->

CREATING A REPORT OF OBSERVATIONS OF YOUR CHOOSING

1: Select species 2: Select period 3: Select region 4: Select purpose 5: Other settings 6: Select report **REPORT WIZARD**

REPORT WIZARD

Welcome to the **REPORT WIZARD!**

This will step you through the process of creating an observation report of your choosing. You do not necessarily have to follow the above order, but in doing so it will help you cover all options. It is advised to click on the 'Report wizard' help icon left of the above steps, if you have not done this before. This will help you on the basics.

<- wizard bar

The wizard will walk you through the various steps you can take to select criteria for display in the report. As before, each item you select to include on your report will appear in the 'Query bar' above the wizard to help you keep track of your selections.

You can enter in a specific **species name** or a **period** of time, a **location** by region, district, ecological district or the **Geographic Extent** (from the dynamic map found under the 'Select region' step), or **Other Settings** (stage, status filters and means of ordering). You can then display this data in the 'Select report' step (step 6) as record lists, distribution maps, or species lists or it can be exported into an Excel spreadsheet for further processing.

Note: you can always go backward or forward in these steps and change the search criteria (Query bar will reflect all changes). You also can remove any of the report items by clicking the item on the Query bar (e.g. if you click on the species name it will disappear and allow you to search all species within the period, geographic or other constraints still displayed in the Query bar). If you click **New search** (appears to the

right of Query bar after the first item is chosen in any of the wizard steps) it will eliminate all existing search criteria and you will have to start again.

When finished you can log out or just close the window. If you don't log out your session will remain open for about 1 day, which means that if you return during this time you will not have to log in again. This is only on the current computer you are using. If you go the NZBRN portal on a different system you will have to log in. No one else can see your login unless they visit the computer you were just on, and in the case that you share a computer it might be best that you log out after each session to ensure security.

Herpetofauna Records

STARTING UP

Click on **Gecko** icon from NZBRN home page or the Main portal page.

Sign Up: for first time *reporters*¹⁴

Enter name, address, email, etc. You can specify which information you want to be available to other users. When you have submitted the information you will immediately receive an email giving you your password and the username you chose.

If you do not receive the email within 10 minutes contact the system administrator: Fuglestadm@LancareResearch.co.nz. Please do not attempt to register again until you find out whether your first attempt succeeded but the email did not get to you for any reason. It may just be delayed or the email address you entered while registering had an error in it; computers are very fussy!

Now you can **Login**.

Once you are logged in it is recommended that you change your password to something more friendly by clicking on the Personal tab and at the top of the form click on 'Change password' link and follow the instructions.

Statistics provides a running total of records and reporters

Species List provides a full list of plant scientific names (including mosses and liverworts) and lichens. The Fungal portal shows the equivalent fungal names.

Show Records enables anyone to view all records according to criteria that you specify.

Login: username, password.

'Personal tab' enables you to view and change various personal settings. These are view or change your personal details, co-observers (they must also be registered with the system), report settings and purposes (see graphic below).

Main portal	Start	Create record	Show records	Species list	Statistics	Personal	Instructions	Logout
Personal information	My sites	My co-observers	Report settings	My purposes				

¹⁴ Someone who makes observations and enters records on this system.

CREATING RECORDS

Click on **‘Create record’** tab at the top and you will see the following ‘Observation wizard’:

Query bar ->

HOW TO RECORD AN OBSERVATION

1: Select purpose 2: Co-observer 3: Select location 4: Record entries Excel upload >> OBSERVATION WIZARD <- wizard bar

There are two different ways to record an observation in the system. You can record via a form or via a text file. For larger data sets it is recommended that you import with the Excel spreadsheet method.

You can go straight to the Excel import here: Excel upload >>

In order to record an observation you must have co-ordinates. You can do this several ways:

- If you do not know the co-ordinates for the place you visited you can go to the 'Select location' step and then click on the 'Find site using map' button in the center of the page and use the interactive map to find the closest co-ordinates.
- If you already know the co-ordinates you can go directly to the "Record observation" tab. Then, you can put the co-ordinates directly in the record form.

If you want to add a co-observer you can go to the "Select observer" step. This person must, however, previously exist as a registered user (reporter) in the system. You do not need to state a co-observer.

If you want to assign your observation to a special purpose (inventory methodology) you can choose a purpose in the "Purpose" tab. You need not assign a purpose.

This ‘wizard bar’ will walk you through the process of recording your observations. As you select various criteria they will appear at the top of this wizard in the ‘query bar’ (noted above).

All of these steps are optional except that of a location, and even the location can be chosen at the ‘Record entries’ form (step 4), not necessarily in the ‘Select location’ step (step 3).

Going through the wizard steps, your first option is to choose a Purpose (step 1). The purposes are composed of common and personal purposes. The personal purposes must have already been created under the Personal tab option. If you have not created any purposes previously then there will be none to choose from at this point.

If you want to can choose a co-observer (step 2. This person must be someone already registered in the system).

When you get to the ‘Select location’ step (see below graphic) you have a choice of using any personal sites you may have chosen up to this point, searching for a site, choosing or creating a new site from a dynamic map. If you wish you can use just the grid references

(Easting and Northing) of the location. The system uses the NZTM (New Zealand Trans Mercator) system but will convert your NZMG (New Zealand Map Grid) Easting and Northing for you.

The screenshot shows the 'OBSERVATION WIZARD' interface. At the top, there is a progress bar with four steps: 1. Select purpose, 2. Co-observer, 3. Select location, and 4. Record entries. An 'Excel upload' button is also present. Below the progress bar, a message states 'You do have personal sites. Your location choices are:' followed by a list of options: 'Choose from public sites at the very bottom', 'Use dynamic map to locate site or create a new personal site (new site will be used for this observation and can be used for future observations)', and 'Choose from your personal sites below'. A 'Find or create a site:' button with a 'Find site using map' icon is highlighted with a yellow callout box: '<- Use map to find/create site'. Below this, there are two dropdown menus: '- Province -' and '- Select site -', with a yellow callout box: '<- Personal sites'. A 'SEARCH COMMON SITE' section follows, with a 'Begins with' dropdown, a 'Site name' input field, and a 'SEARCH' button, highlighted with a yellow callout box: '<- Search for common site'. A checkbox labeled 'Search only among sites in my report area.' is also visible.

If you choose to find or create a **New Site** using the map, a NZ map will appear and you can zoom down by clicking on progressively smaller red squares (on the right of map), then pointing/clicking (with cursor) to position on the map¹⁵. It will be useful to have with you a standard NZ road map or topo map to help navigate through the more sparsely roaded parts of the country.

You will see green dots across the map on the top two zoom levels, and by ticking the **Display site names** box all the dots will be labelled (based on place names in the NZ Gazetteer and any others that you have created in the past).

or ...

you can create a **New Site** name. At the 4th or 5th (highest) zoom level, Click on the 'flower' symbol (see image below) and point/click on the map with the cursor to the precise location of your **New Site**. You will see these coordinates displayed below the map¹⁶ and these, plus the Administrative Region and District, and the Ecological District and the 10 km Grid Square ID, are displayed below. You will also see the coordinates

¹⁵you can slide the map by pointing near an edge of the map which then becomes the new centre.

¹⁶the given coordinates are a new generation coordinate system [NZTM], but the standard metric grid can be entered and will be automatically converted.

displayed in the Easting and Northing text boxes to the right of the map. If you need to 'tweak' the new locations position you can do so by modifying the Easting and/or northing, then click the 'Show' button to move the orange dot (represents the new location you want to create). You have an opportunity to consider using an existing name by activating the **Would you like to use any of the nearby sites listed** box. A list of the 10 nearest sites and their distances to your orange dot is provided or you can choose a 10 km grid square where the precise location is not known (this feature together with a 1 km grid square ID is still under development).

1: Select purpose
 2: Co-observer
 3: Select location
 4: Record entries
 Excel upload >>
 OBSERVATION WIZARD

+ Set the scale by clicking on the scalebar. Click on the map to center the position.

Click the **REPTILE** icon to create a new site, mark the site on the map, and enter a site name below.

DISPLAY ON THE MAP

Enter coordinates and click the "View" button to locate the point on the map. The default coordinates use New Zealand Transverse Mercator (NZTM), but should you want you can select NZMG and enter the coordinates as map grid references.

NZTM
 NZMG

→ Easting

↑ Northing

SHOW >

[List site names](#) Display site names

RESULT OF YOUR SELECTION

Easting :	1565380
Northing :	5174190
Region :	Canterbury
District :	Christchurch City
Ecological district :	Low Plains
10KM Grid ID:	8097

Use my selected coordinates only (no placename)

Would you like to use any of the nearby sites listed:
 Below is listed the 10 alternate sites within 10000 metres of the location you selected. You can either choose one of the known sites or create a completely new one below.

- Display site names - ▾

Create a new site? :
 Enter the name of the new site here. This site will be kept in database as your own personal site and will not be used for anyone else. You can then reuse this site for subsequent observation reports.

SAVE >

Scale select bar ->

Click to create a new site.

Quick way to go to a location: enter Easting and Northing, select coordinate type (NZTM OR NZMG) and then click 'Show' button.

Once you create new site choose:
 1. User coordinates only
 2. Select a nearby common site
 3. Create a new site

Note: before Entering records and losing the map, make a note of the elevation (contours) for subsequent entry.

Then finally **Enter Record** into a table (takes up to 10 records at a time) or **Excel Import** (paste in up to 50 records from a spreadsheet). You can **Change Settings** on upper right of table to include or hide fields. The tick boxes at right allow you to specifically indicate absent records, uncertain identification, records reported to you indirectly, hidden records (only visible to the reporter), documented records (from literature), or 'protect precise location' of records (displayed only as 5 km grid). Once data is entered click **Save** at bottom right of entry form. Be very careful **not to accidentally hit the Reset tab** or you will lose the data just entered!

The sequence of actions for species entry:

- **Enter Record** – the entry form for 10 records appears; the site name selected/named above appears on the top line and also in the site name field in the form. The current date is automatically entered and so must be changed if observation is different
- **Scroll down** to bottom of page – click on '**Species list**' button. A window appears
- **Type in the first few letters** of the observed genus¹⁷. A list of all species containing those letters appears
- **Scroll down** and select the species wanted. For large genera, such as Coprosma or Hebe, it can save time by typing in whole genus name and first letter of species
- **Close the species list window** and you will be returned to the entry form
- **Fill out the remainder of the fields** as able¹⁸
- **Add further species** (up to 10)
- **Location:** you can enter in a grid ref directly on this form also, should you choose to put your locations in at this step. The magnifying glass (see graphic below) will allow you to check the location of your entered grid ref by bringing up a map. The red arrow to the left will allow you to convert an NZMG grid ref entry to NZTM

¹⁷ Because of lack of standard plant names we use scientific names, complete with authorities, for the plant and fungal portals. Make sure you don't inadvertently select a name that is part of a hybrid or uses an older authority. We will soon strip these out of the lists. You can find the currently accepted name and authority in www.landcareresearch.co.nz/research/plantsportal.

¹⁸ Density of plants, % cover by drop down list of standard cover classes, habitat (drop down list), substrate (ditto) (host, at present, must be entered into comments), site name (will already be entered automatically), location accuracy (drop down), start and end dates, stage (drop down), and comments. There are then the tick boxes as already described.

Easting (NZTM)	Northing (NZTM)	Accuracy	Elevation (m)	Start date	Stage
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	2007-08-03	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESET SAVE

- **Change form settings:** Click on the ‘Change settings of recording form’ link to modify the record entry form (if you do this after having entered data, all data will be lost)
- **Save:** button at bottom right of form (see graphic above)

DISPLAYING RECORDS

Show Records allows you to display information about **Species**

This also uses a step by step wizard (Report Wizard – see graphic below). This is similar to the ‘Observation Wizard’. All of these are optional but you must choose at least one item from one of the steps or when you get to the ‘Select report’ step all the report styles will be disabled.

Main portal Create record **Show records** Species list Statistics Personal Instructions Logout

Species Time window (period) Geographic extent Region Other Presentation Administrate records

Query bar ->

CREATING A REPORT OF OBSERVATIONS OF YOUR CHOOSING

1: Select species 2: Select period 3: Select region 4: Select purpose 5: Other settings 6: Select report **REPORT WIZARD**

<- wizard bar

Welcome to the **REPORT WIZARD!**
 This will step you through the process of creating an observation report of your choosing. You do not necessarily have to follow the above order, but in doing so it will help you cover all options.
 It is advised to click on the 'Report wizard' help icon left of the above steps, if you have not done this before. This will help you on the basics.

The wizard will walk you through the various steps you can take to select criteria for display in the report. As before, each item you select to include on your report will appear in the ‘Query bar’ above the wizard to help you keep track of your selections.

You can enter in a specific **species name** or a **period** of time, a **location** by region, district, ecological district or the **Geographic Extent** (from the dynamic map found

under the 'Select region' step), or **Other Settings** (stage, status filters and means of ordering). You can then display this data in the 'Select report' step (step 6) as record lists, distribution maps, or species lists or it can be exported into an Excel spreadsheet for further processing.

Note: you can always go backward or forward in these steps and change the search criteria (Query bar will reflect all changes). You also can remove any of the report items by clicking the item on the Query bar (e.g. if you click on the species name it will disappear and allow you to search all species within the period, geographic or other constraints still displayed in the Query bar). If you click **New search** (appears to the right of Query bar after the first item is chosen in any of the wizard steps) it will eliminate all existing search criteria and you will have to start again.

When finished you can log out or just close the window. If you don't log out your session will remain open for about 1 day, which means that if you return during this time you will not have to log in again. This is only on the current computer you are using. If you go the NZBRN portal on a different system you will have to log in. No one else can see your login unless they visit the computer you were just on, and in the case that you share a computer it might be best that you log out after each session to ensure security.

Plant Records

STARTING UP

Click on **Plant** icon from NZBRN home page or the Main portal page.

Sign Up: for first time *reporters*¹⁹

Enter name, address, email, etc. You can specify which information you want to be available to other users. When you have submitted the information you will immediately receive an email giving you your password and the username you chose.

If you do not receive the email within 10 minutes contact the system administrator: Fuglestadm@LancareResearch.co.nz. Please do not attempt to register again until you find out whether your first attempt succeeded but the email did not get to you for any reason. It may just be delayed or the email address you entered while registering had an error in it; computers are very fussy!

Now you can **Login**.

Once you are logged in it is recommended that you change your password to something more friendly by clicking on the Personal tab and at the top of the form click on 'Change password' link and follow the instructions.

Statistics provides a running total of records and reporters

Species List provides a full list of plant scientific names (including mosses and liverworts) and lichens. The Fungal portal shows the equivalent fungal names.

Show Records enables anyone to view all records according to criteria that you specify.

Login: username, password.

'Personal tab' enables you to view and change various personal settings. These are view or change your personal details, co-observers (they must also be registered with the system), report settings and purposes (see graphic below).

Main portal	Start	Create record	Show records	Species list	Statistics	Personal	Instructions	Logout
Personal information	My sites	My co-observers	Report settings	My purposes				

¹⁹ Someone who makes observations and enters records on this system.

CREATING RECORDS

Click on **‘Create record’** tab at the top and you will see the following ‘Observation wizard’:

The screenshot shows the 'Create record' wizard interface. At the top, a navigation bar includes 'Main portal', 'Create record' (circled in red), 'Show records', 'Species list', 'Statistics', 'Personal', 'Instructions', and 'Logout'. Below this is a secondary bar with 'Info', 'My sites', 'New site', 'Co-observer', 'Purpose', 'Diary', 'Enter record', and 'Import from Excel'. A yellow box labeled 'Query bar ->' points to a search bar. The main content area is titled 'HOW TO RECORD AN OBSERVATION' and features a 'wizard bar' with steps: 1: Select purpose, 2: Co-observer, 3: Select location, 4: Record entries, and Excel upload. A yellow box labeled '<- wizard bar' points to the 'OBSERVATION WIZARD' header. The main content area contains instructions on how to record an observation, including details about co-ordinates and co-observers.

This ‘wizard bar’ will walk you through the process of recording your observations. As you select various criteria they will appear at the top of this wizard in the ‘query bar’ (noted above).

All of these steps are optional except that of a location, and even the location can be chosen at the ‘Record entries’ form (step 4), not necessarily in the ‘Select location’ step (step 3).

Going through the wizard steps, your first option is to choose a Purpose (step 1). The purposes are composed of common and personal purposes. The personal purposes must have already been created under the Personal tab option. If you have not created any purposes previously then there will be none to choose from at this point.

If you want to can choose a co-observer (step 2. This person must be someone already registered in the system).

When you get to the ‘Select location’ step (see below graphic) you have a choice of using any personal sites you may have chosen up to this point, searching for a site, choosing or creating a new site from a dynamic map. If you wish you can use just the grid references

(Easting and Northing) of the location. The system uses the NZTM (New Zealand Trans Mercator) system but will convert your NZMG (New Zealand Map Grid) Easting and Northing for you.

If you choose to find or create a **New Site** using the map, a NZ map will appear and you can zoom down by clicking on progressively smaller red squares (on the right of map), then pointing/clicking (with cursor) to position on the map²⁰. It will be useful to have with you a standard NZ road map or topo map to help navigate through the more sparsely roaded parts of the country.

You will see green dots across the map on the top two zoom levels, and by ticking the **Display site names** box all the dots will be labelled (based on place names in the NZ Gazetteer and any others that you have created in the past).

or ...

you can create a **New Site** name. At the 4th or 5th (highest) zoom level, Click on the 'flower' symbol (see image below) and point/click on the map with the cursor to the precise location of your **New Site**. You will see these coordinates displayed below the map²¹ and these, plus the Administrative Region and District, and the Ecological District and the 10 km Grid Square ID, are displayed below. You will also see the coordinates

²⁰you can slide the map by pointing near an edge of the map which then becomes the new centre.

²¹the given coordinates are a new generation coordinate system [NZTM], but the standard metric grid can be entered and will be automatically converted.

displayed in the Easting and Northing text boxes to the right of the map. If you need to 'tweak' the new locations position you can do so by modifying the Easting and/or northing, then click the 'Show' button to move the orange dot (represents the new location you want to create). You have an opportunity to consider using an existing name by activating the **Would you like to use any of the nearby sites listed** box. A list of the 10 nearest sites and their distances to your orange dot is provided or you can choose a 10 km grid square where the precise location is not known (this feature together with a 1 km grid square ID is still under development).

OBSERVATION WIZARD

1: Select purpose 2: Co-observer 3: Select location 4: Record entries Excel upload

Scale select bar ->

Click to create a new site.

Quick way to go to a location: enter Easting and Northing, select coordinate type (NZTM OR NZMG) and then click 'Show' button.

Once you create new site choose:
1. User coordinates only
2. Select a nearby common site
3. Create a new site

Set the scale by clicking on the scalebar. Click on the map to center the position.

Click the FLOWER icon to create a new site, mark the site on the map, and enter a site name below.

DISPLAY ON THE MAP

Enter coordinates and click the "View" button to locate the point on the map. The default coordinates use New Zealand Transverse Mercator (NZTM), but should you want you can select NZMG and enter the coordinates as map grid references.

NZTM NZMG

→ Easting
1658160

↑ Northing
5302980

SHOW

List site names Display site names

RESULT OF YOUR SELECTION

Easting : 1658160
Northing : 5302980
Region : Canterbury
District : Kaikoura
Ecological district : Kowhai
10KM Grid ID: 9666

Use my selected coordinates only (no placename)
 Would you like to use any of the nearby sites listed:
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- Display site names -

Create a new site? :
Enter the name of the new site here. This site will be kept in database as your own personal site and will not be used for anyone else. You can then reuse this site for subsequent observation reports.

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- **Scroll down** to bottom of page – click on '**Species list**' button. A window appears
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- **Close the species list window** and you will be returned to the entry form
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²³ Density of plants, % cover by drop down list of standard cover classes, habitat (drop down list), substrate (ditto) (host, at present, must be entered into comments), site name (will already be entered automatically), location accuracy (drop down), start and end dates, stage (drop down), and comments. There are then the tick boxes as already described.

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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESET SAVE

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Query bar ->

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