Pearl Mussel Programme

Online Map User Guide

August 2019
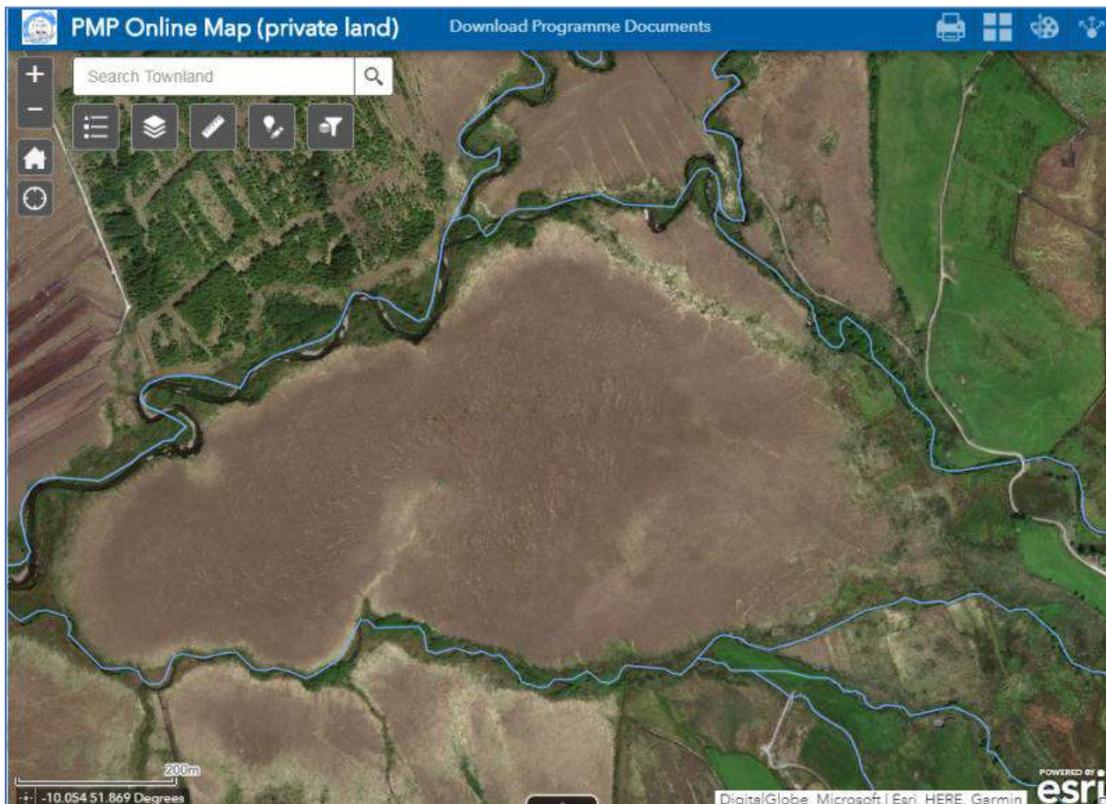
Contents

Map Functions summarised in Section 7
1 Zoom control
2 View legend
3 Layer control
4 Measure
5 Edit (add data)
6 Filter (view single farm)
7 Print
8 Change basemaps
9 Draw (mark up)
10 Share you map
11 Scale bar

1   Introduction

The Pearl Mussel Project Team have developed a web based mapping application for use by advisors during the course of the Programme. The application is a desktop resource is accessed through any web browser. It is to be used by advisors to submit all information relating to farm assessments and farm planning to the Project Team. The application is optimised for viewing on a desktop computer although can also be accessed through the web browser of any mobile device that has internet access. The application is to be used by advisors for the following purposes:

- As a resource to view and interrogate data relating to each Programme participant. The information available on the map includes; aerial photography, watercourses, freshwater pearl mussel habitat, farm plot outlines and habitat plots.
- To prepare and print field maps.
- To submit assessment data. Data is recorded by advisors in the field using specially designed hard copy data sheets. Following completion of the farm visit advisors use the web map application to upload the data on these sheets to the project team. The following information is to be submitted using the web application:
    o   Plot scorecards;
    o   Whole-farm scorecard;
    o   Farm information points;
    o   Suggested supporting actions;
    o   Watercourse pressure points; and
    o   General survey notes.

This document aims to guide the advisor through the use of the web map application. It is foreseen that this document will be a useful reference document which advisors can refer to when using the web map application.

2   Logging in to the map

Pearl Mussel Programme approved advisors have access to the online map and are provided log in details by the Project Team once they have been nominated by a participant farmer.

The PMP online map for private land can be accessed at this link: bit.ly/pmponlinemap2019

The PMP online map for commonage land can be accessed at this link: bit.ly/pmponlinemapcommonage

When you visit one of the above links you will be asked to log in. Use the user name and password that you were provided with and click the blue 'Sign In' button. The map usually loads within 30 seconds but in the case of a poor web connection may take a little longer.
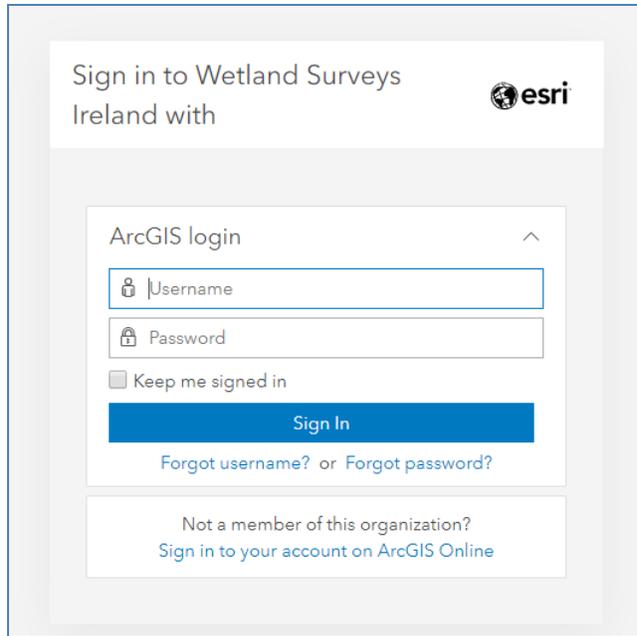
On signing in a pop-up window appears requesting you to 'Show individual farm' as explained in the next section.

3   Viewing and working on an individual private farm

When working on the map the advisors will need to display the single farm they intend to work on. Once you have logged in, a pop-up filter window will appear allowing you to view an individual farm. Enter the three digit PMP Farmer ID into the box and press the 'Apply' button in the bottom of the window. The map will then zoom to the private land holding for that participant farmer.

Should you wish to switch to a different farm you will need to go through this process again, use the filter button on the tool bar in the top left (see below) to bring up the filter pop-up window. Again, type

in the three digit PMP Farmer ID of the new farm you wish to view, press 'apply' and the map will automatically zoom to that farm and display only that farm details. This process allows you to switch between different participant farms.

Show individual farm (filter)

4   Viewing and working on an individual commonage

Once you have logged in to the commonage version of the online map, a pop-up will appear allowing you to view an individual commonage. Enter the four digit Commonage ID into the box and press the 'Apply' button in the bottom of the window. The map will then zoom to the specified commonage parcel.
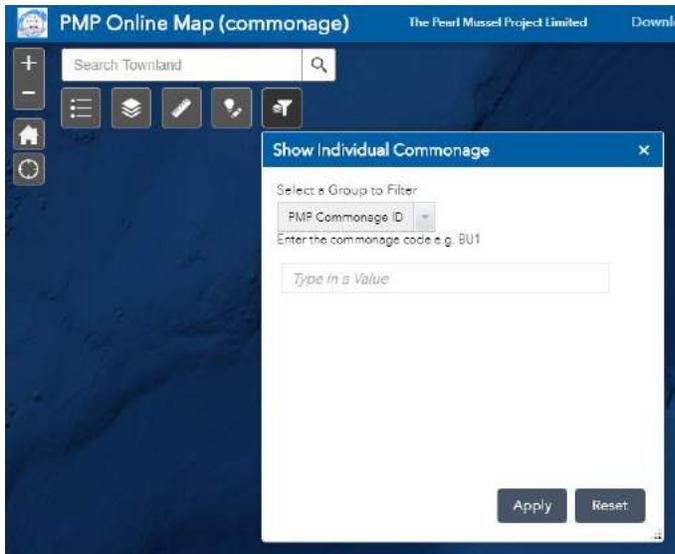
Should you wish to switch to a different commonage you will need to go through this process again, use the filter button on the tool bar in the top left (see below) to bring up the filter pop-up window. Again, type in the four digit Commonage ID of the new farm you wish to view, press 'apply' and the map will automatically zoom to that commonage and display only that commonage details. This process allows you to switch between different participant farms.

Show individual farm (filter)

5   Add PMP Field Data (edit)

Following completion of your farm visit you will need to submit the data to the PMP team via the data online map. To enter data for a specific farm or commonage you will need to start editing. To do this, click the editing button underneath the search bar in the top left hand corner of the screen. When you hover your curser over the icon the following hint appears "Add PMP Field Data".

After clicking on the button all features that can be created will then appear in a pop-up window, they appear under a series of categories (score cards, farm information points, survey notes, habitat changes, supporting actions (points, lines, and polygons)). Scroll down through this list until you find the feature that you wish to create.
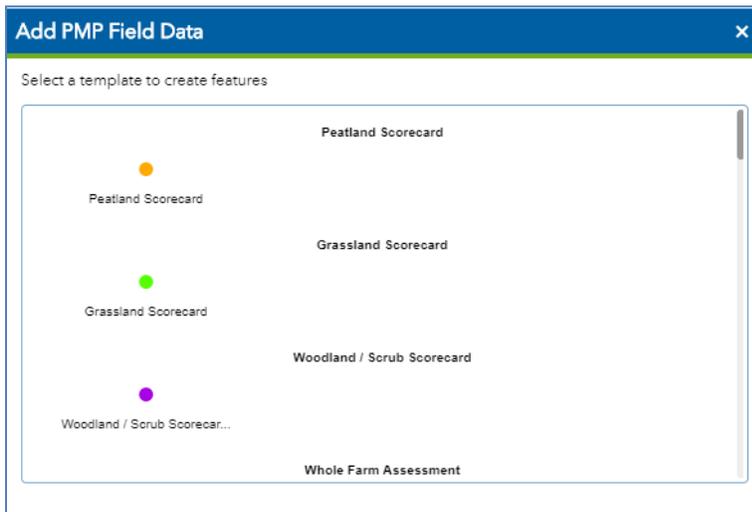
Click on the feature so that it is highlighted, and then click on the area of the map where you would like it to appear. It is important that the feature is placed within the boundary of the relevant PMP plot. Do not create features outside of PMP plots.

Point features are created by a single click of your mouse at the desired location.

Line features (such as habitat boundary chance or linear supporting action) are created by a a series of clicks along the desired line, a double click will complete the line.

Polygon (area) features (area delineating a supporting action) are drawn by a series of clicks, once the desired area is enclosed by a line then a double click to complete the feature.
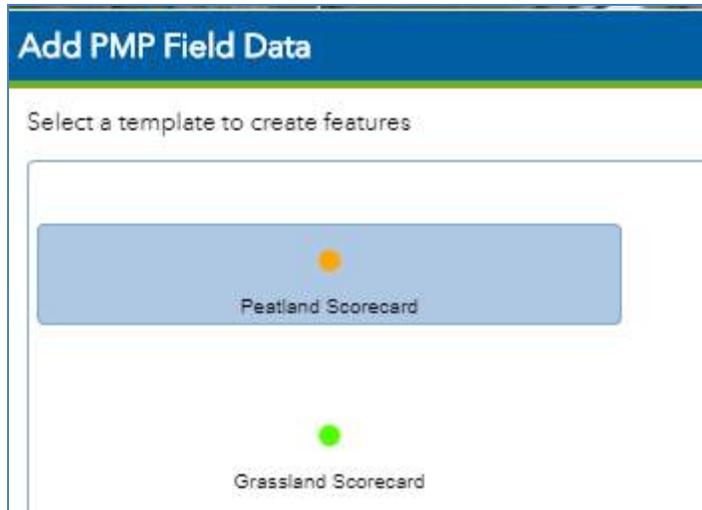
Once you have selected the location of the feature on the map, a pop-up window will appear for you to enter your associated data. The first two fields, PMP Farmer ID / PMP Commonage ID and PMP Plot number will be auto-filled according to the plot that you have placed the feature within. Proceed through the form filling in all required fields. Once you are happy that your feature is complete click the 'Save' button on the bottom right hand corner of the pop up box, the feature will now have been submitted, although you can still edit the information associated with the feature (see below). Prior to pressing save, if you have made an error and want to start over, press the 'Clear' button in the bottom left hand corner of the screen.

You are unable to delete data points one they have been saved. although you can update the data. If you created a point in error, please just note that the point is a mistake in the comments box.

To update / correct the data after it has been saved , select the point (or feature), click on the three grey dots in the bottom right hand corner of the pop-up window. Select 'Smart Editor' (as illustrated below) and then update your feature, press save once you are happy with your updates, the updated feature has now been submitted.
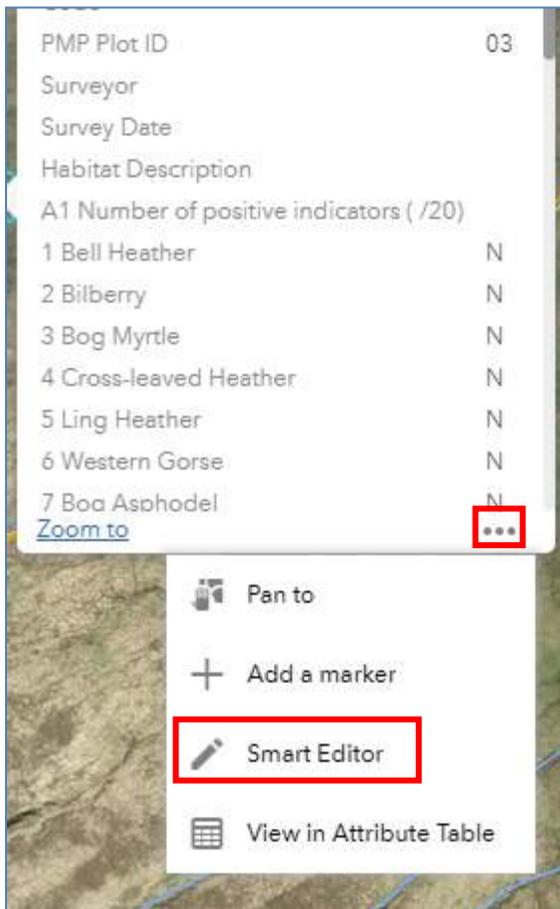
Once a point has been saved it has been submitted to the PMP Team.

A summary of all the features that can be created in the online map is provided in the table below. Please note that certain points are required for each plot, while others may only be required at the farm level (see table).

- The following must be submitted for each plot: **score card point**
- The following must be submitted for each farm: **whole farm assessment**

Other features are submitted as appropriate.

Table 1: Features that can be submitted on the online map.

Feature	Requirement	Map label
Scorecard Points		
Peatland scorecard	One per peatland habitat plot	Plot score (out of 10)
Grassland scorecard	One per grassland habitat plot	Plot score (out of 10)
Woodland / Scrub scorecard	One per woodland / scrub habitat plot	Plot score (out of 10)
Whole farm assessment	One per farm	Outcome of whole farm assessment
Farm Information Points		
Cattle drinking point	As appropriate	Information point name
Dipping tank	As appropriate	Information point name
Farmyard	As appropriate	Information point name
No fertiliser	As appropriate	Information point name
Out-wintering field	As appropriate	Information point name
Silage field	As appropriate	Information point name
Slurry spreading	As appropriate	Information point name
Watercourse crossing	As appropriate	Information point name
Additional Information		
Survey note	As appropriate	None
Pressure point	As appropriate	None
Habitat code change	As appropriate	None
Plot boundary change*	As appropriate	None
* please note that if you split a plot into two or more plots, you will need to ensure that a scorecard point is collected for each of the new plots.		
Supporting Actions *(Only samples of 7 actions shown here)*		
F1 Farm track upgrade	As appropriate	Supporting action code (e.g. F1)
G1 Labour	As appropriate	Supporting action code (e.g. G1)
IS1 Rhododendron / gorse (high cover)	As appropriate	Supporting action code (e.g. IS1)
L1 Post and wire fence	As appropriate	Supporting action code (e.g. L1)
W1 Peat / plastic dams	As appropriate	Supporting action code (e.g. W1)
EW1 Environmental workshop	As appropriate	Supporting action code (e.g. EW1)
O Other Supporting Action	As appropriate	Supporting action code (e.g. O)

6   Creating and Printing Field and Farm Maps

It is possible to create a pdf document copy of the map you are viewing, which you can subsequently print for use in the field or for discussions with farmer or PMP team. The area being viewed on the screen will be the area shown on the pdf document. Only those layers that are switched on when the map is created will be visible in the map. This tool is extremely useful for preparing field maps. By default a legend, scale bar and feature labels will appear on the pdf map.

Assuming you have selected the farm / commonage by following the methods outlined in Section 3 above, proceed to zoom to the desired scale you wish to use for your printed map by using the zoom feature in the top left of the screen.

Zoom in (+) or out (-) to desired scale)

Select the print tool on the tool bar in the top right of the map screen.

Select print tool in top right of map
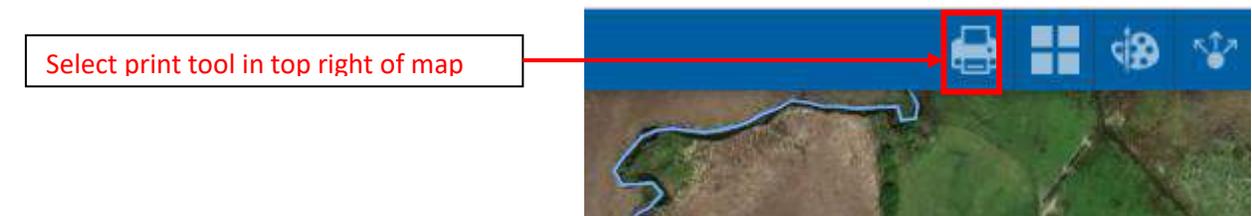
After selecting print the following pop-up window appears. You can insert a title to appear on the map, by default the map will be scaled at A4 landscape and exported as a pdf. There are various other options should you prefer to use alternative layout or format. The advanced print settings allows you to change various items on the map (specify whether you wish to include labels, scale bar, legend etc. It also allows you to alter the units for scale bar). Once you press print the pdf document is created and you can download to your computer for further use.
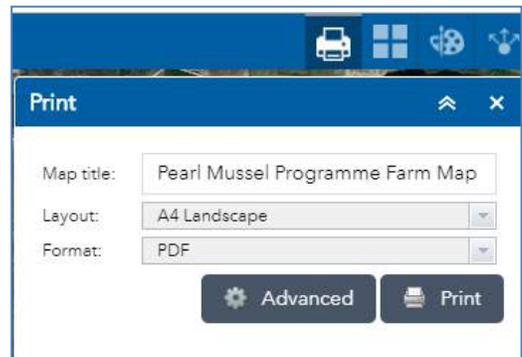
7   Explanation of all Map Functions (Use of map tools or widgets)

This section presents a summary of the various tools available on the PMP Online Map. The tools are numbered and labelled in the following figure and corresponding summary descriptions on their use are presented below.
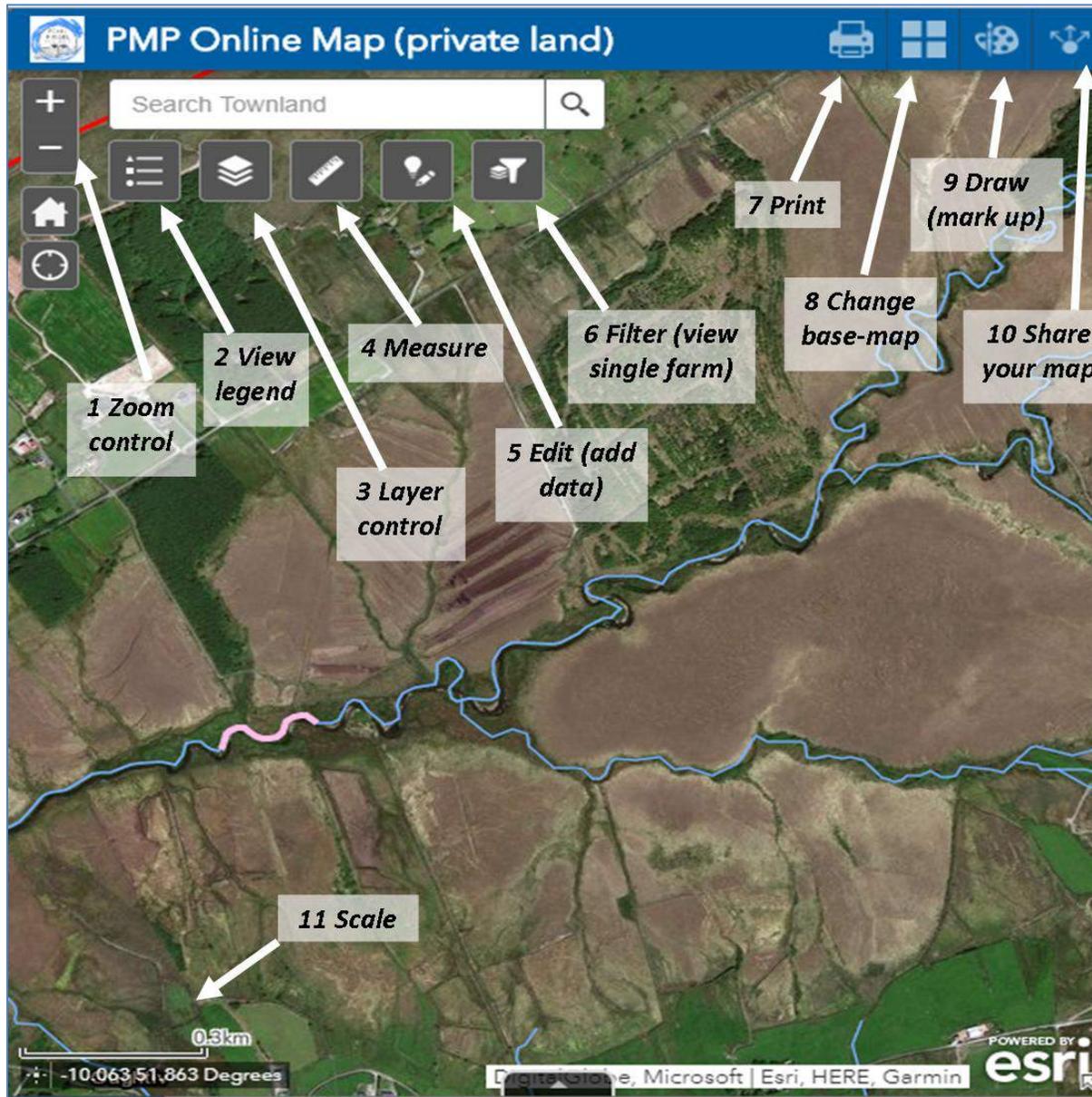
1 Zoom control: Use the + and – buttons to zoom in and out. You can also zoom using the roller on your mouse.

2 View legend: Clicking on the legend button will provide you with a legend for all symbols currently visible in the map. Note that the items visible in the legend will change depending on how far you zoom in or out (not all symbols are visible at larger scales) .

3 Layer control: Clicking on the layer button will allow you to view a list of all layers present in the map. By un-ticking the box to the left of a layers name you can turn off that layer, meaning that it is no longer visible in the map. To turn a layer back on simply tick the box again. More advanced features such as setting transparency can be selected by clicking on the three dots to right of the layer.

4 Measure: The measurement tool allows you to measure an area or a length. It will also provide you with the latitude and longitude of a point. To measure an area click on the button outlined in red opposite and draw a polygon on the map, to measure a length click on the button outlined in green opposite and draw a line on the map, and to get a coordinate of a point click on the button outlined in yellow opposite and click a location on the map. When measuring area and length you can chose the units you wish to measure in from the drop down menu, by default it will use hectares for area and kilometres for length. The result of your measurement will be shown in the measurement box.
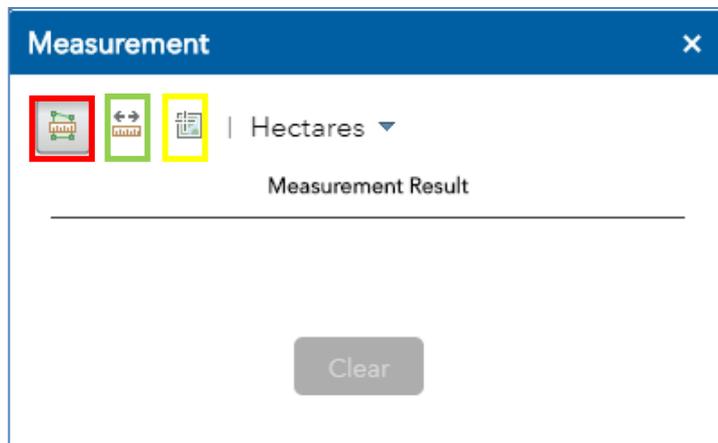
5 Edit (add data): This button must be selected to enable you to submit data for a specific farm or commonage. See the earlier section on Data Entry for more details.

6 Filter (view single farm): A filter must be applied to allow you to view a specific farm or commonage. If you navigate your way to a farm or commonage on the map using the zoom and pan functions, without the filter turned on, you will not be able to see any data relating to that farm or commonage. By applying the filter data relating to just one farm or commonage will only be shown at one time on the map. No data will be shown until a filter has been applied, i.e. a specific farm or commonage has been searched for.
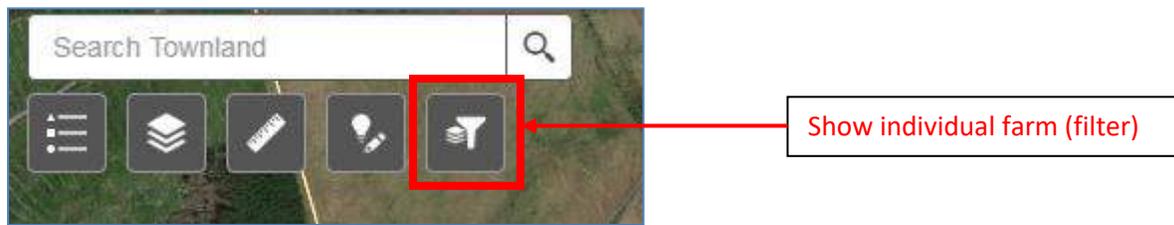
7 Print: The print tool allows you to generate a pdf and print a map of a specific farm or commonage. The area being viewed on the screen will be the area shown on the map. Only those layers that are switched on when the map is created will be visible in the map. This tool is extremely useful for preparing field maps. By default a legend, scale bar and feature labels will appear on the map.
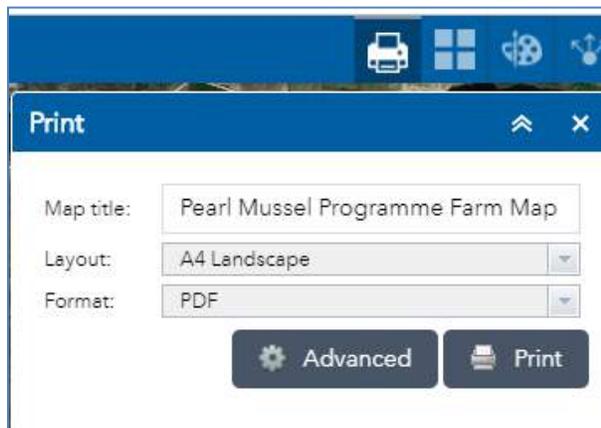
If you would like to print a map without labels, scale bar or legend, you can specify this in the Advanced print settings (select the 'Advanced' button in the bottom of the print pop-up). You can also specify the units displayed on the scale bar here. Once you are happy with your map press the 'Print' button to print to create a pdf. Select the pdf to view the file and print. See further details in Section 6 above.

8 Change basemaps: Clicking on this button will open the basemap gallery. Once selected, a basemap will become the basemap visible in the map. To return to the default basemap, chose either the 'Imagery' or 'Imagery with labels' basemaps.
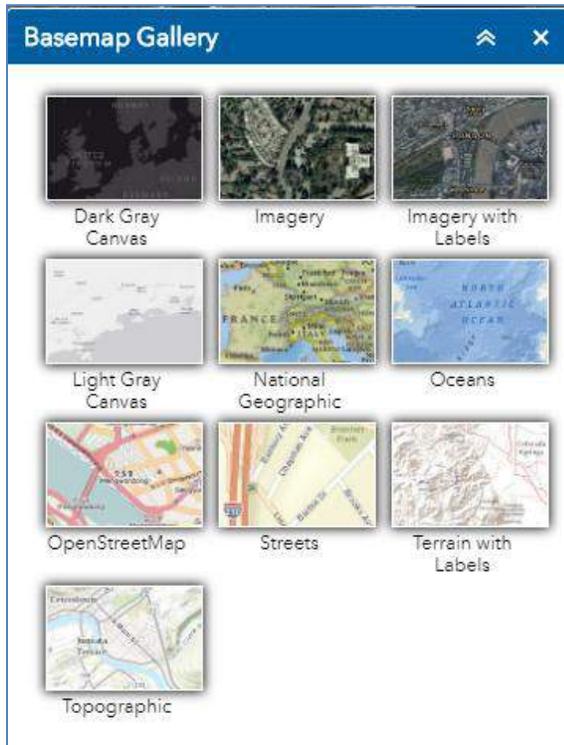
9 Draw (mark up): The draw tool allows you to annotate the map using a selection of shapes and colours. This can be a useful tool if you would like to indicate or annotate something specific on the map. You can then print the marked up map to pdf or take a screen-grab. The features you draw are temporary features and are not saved within the online map.

10 Share you map: Clicking on this button will provide you with a link for the map that can be shared with others. Note you will still require a username and password to access the map through the link. The shared link will go directly to the extent of the map you were viewing.

11 Scale bar: Scale bar showing distance in metres / kilometres. Beneath the scale bar the coordinates of the centre point on the map are shown.