



Farmplan
gatekeeper

Farm Mapping Lite

Introduction to features

Proagrica

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Introduction to Farm Mapping Lite

With the introduction of Farm Mapping Lite to all Gatekeeper desktop users, the following guide has been put together to help you navigate the new part of your software.

This document is not exhaustive so if you require any further information please consult the support centre on our website, or contact the Gatekeeper support team, who will be happy to advise you.

www.farmplan.co.uk/support/Gatekeeper
use the 'Guides & manuals' and 'FAQs' tabs

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To accompany the release of Farm Mapping Lite, an instructional video has been created and will be accessible from your Gatekeeper dashboard. You may wish to view this video as a first step to understanding how to use the new mapping functionality.

This guide will look at some of the universal features of Gatekeeper mapping, including tools and window layouts, before proceeding to steps you may wish to take.

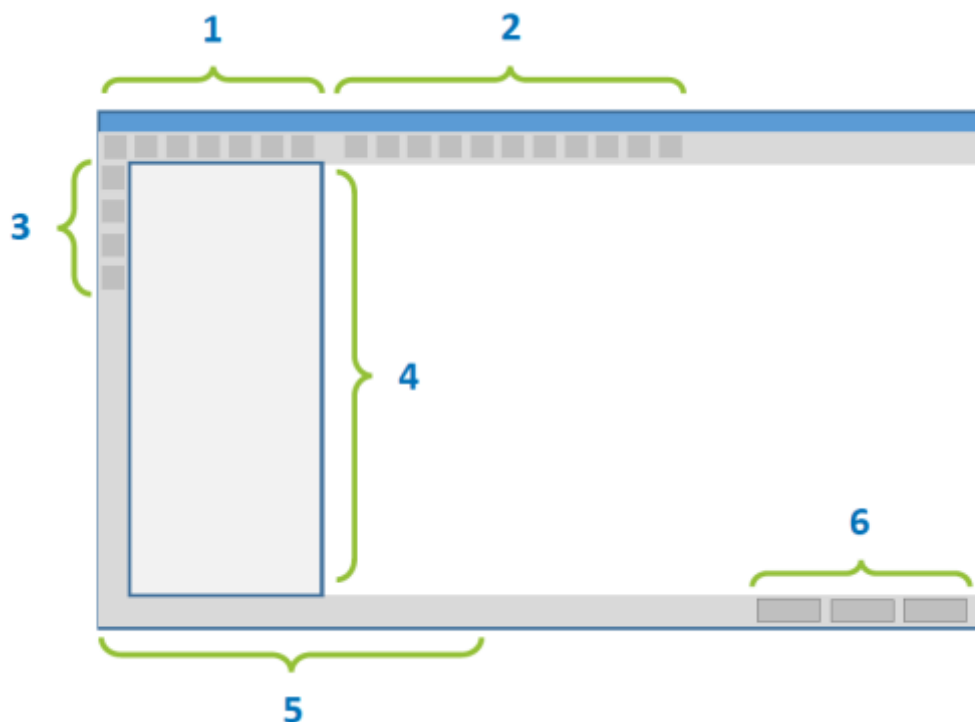
Gatekeeper mapping principles

The mapping window

The mapping window is opened by selecting the 'Farm Map' icon from the Gatekeeper toolbar:



Once you have opened the mapping window, the layout is as follows:



1. Utilities – to save, print, zoom, etc.
2. Tools – measuring tools will be visible here.
3. Menus – the selection in this panel controls the options available in the menu panel (4).
4. Menu information.
5. Map information – including zoom level, top layer name, and cropping year.
6. OK, Cancel, and Save buttons.

The menu icons shown at 3 on the diagram are as follows:





Active tools – to control whichever mapping tool is selected

Layers – to control which mapping layer is on top (and therefore active)

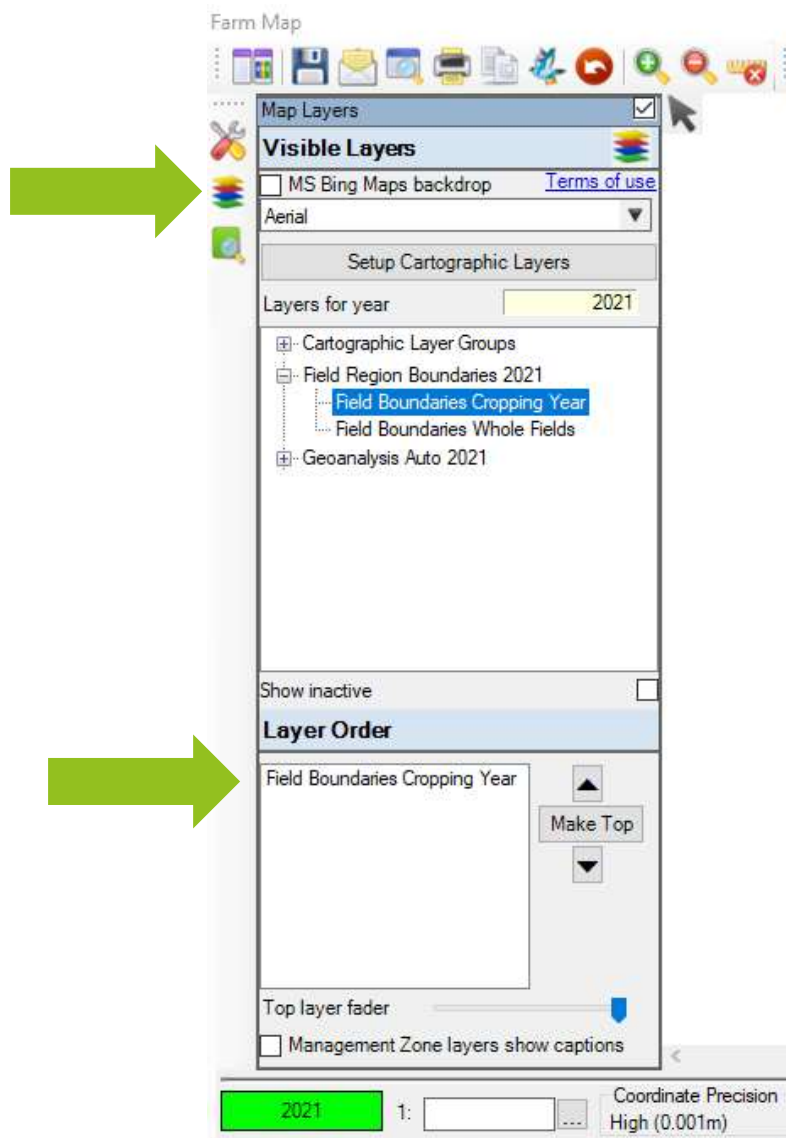
Field groups – to control which field group(s) are being viewed

Layers

Layers is the term used in Gatekeeper mapping to describe the different ‘sheets’ of information that can be stored and viewed.

Different layers may be switched on, with each new layer being opened on the top of the mapping window. However you can only interact with the top mapping layer – so if you wanted to measure a field boundary, for example, the field boundary layer needs to be on top.

Layer order is controlled by selecting the ‘Map Layers’ menu icon, and then using the ‘Layer Order’ submenu:

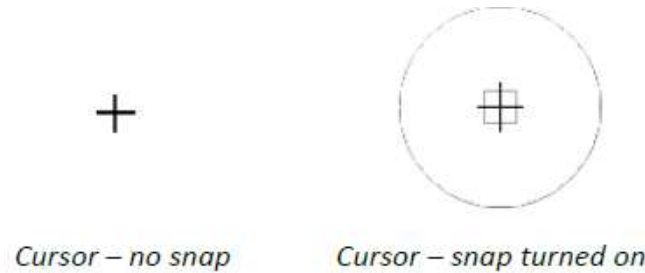


Mapping functions

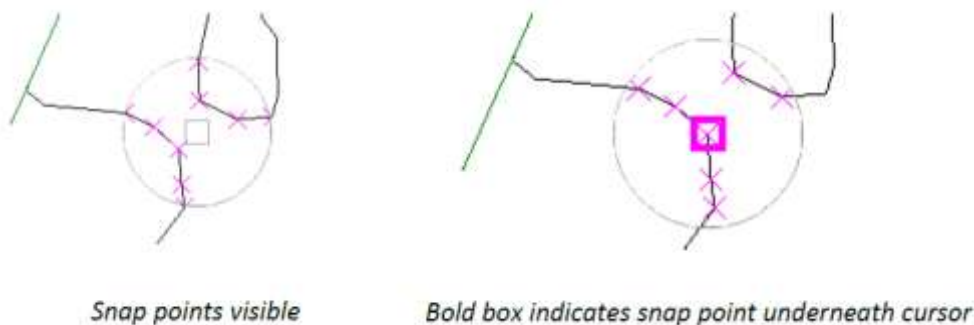
The following options affect how the cursor interacts with the mapping window. They can be accessed either through the right click menu (with your cursor anywhere inside the main mapping window, right click to view menu), or by going to the active tools menu and using the 'Headup display' section at the bottom of the screen.

Snap On

The snap on function makes it easier to identify points in an existing entity and refer to them – for example, to measure a field boundary. When snap is switched on, a snap box appears around the cursor:



When the snap function is switched on, any snap points in an entity display as purple crosses. When the cursor is over a snap point, the box around the cursor turns bold to indicate the lock:



The snap tool can be turned on by either:

1. Right clicking and selecting 'Snap On', or
2. Going to the active tools menu, and under the headup display section putting a tick in 'Snap on'.

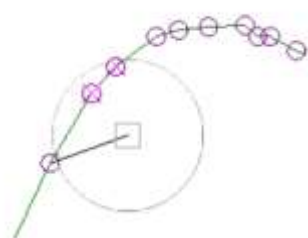
Adjusting the number next to the snap option changes how far away from the cursor the snap function will work. The smaller the number, the more sensitive the snap box.

Line grabber

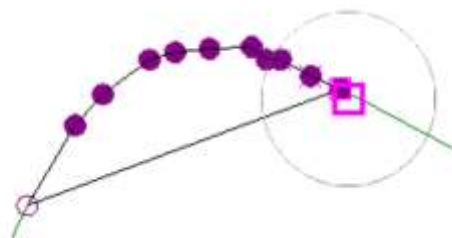
The line grabber function allows you to refer to all the points of an existing entity without having to select each them all individually – for example to trace and measure a line.

1. Turn the line grabber on by either:
 - a. Right clicking and selecting 'Headup display' and then 'Line Grabber On' from the menu, or
 - b. Going to the active tools menu, and under the headup display section putting a tick in 'Line Grabber On'.
2. Click on a snap point of the line you wish to copy
3. As you move your mouse along the line, you will see purple circles have appeared at every point in the line where a snap point exists. You do not have to trace the exact line for the

line grabber to work – as long as the line is traced and the circles have filled, your next left click will select all the highlighted points.



After the first click, all points in the entity have a circle around them



When circles are filled, they have been selected and will be copied with the next left click

The line grabber only acts on one entity at a time. If you are measuring lines from two separate entities (for example, if you're measuring along the side of two different field boundaries), you will need to click onto the second entity once you have finished tracing the first, before the snap points of the second entity are displayed.

Display data

With this option selected, information is displayed around the cursor. The exact information varies depending on the top layer and what kind of entity is under the cursor.

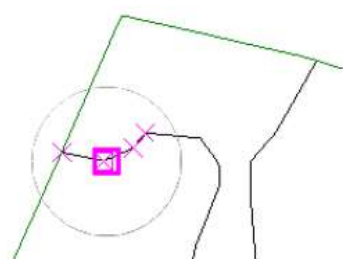
Putting a tick in 'Opaque background' puts a white square behind the display data to make it easier to read.

Turn on display data by either:

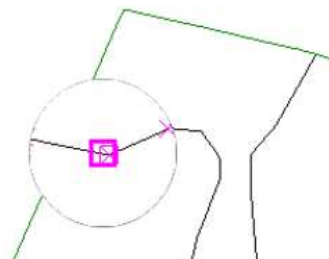
1. Right clicking and selecting 'Headup Display' and then 'Display data', or
2. Going to the active tools menu, and under the headup display section putting a tick in 'Display data'.

Display magnifier

The display magnifier applies a magnification to the area within the circle which surrounds the cursor.



Without display magnifier



With display magnifier

It can be turned on by either:

1. Right clicking and selection 'Headup Display' > 'Magnifier On', or
2. Going to the active tools menu, and under the headup display section put a tick in 'Display magnifier'

The strength of the magnification is controlled through the headup display section of the active tools menu.

Using Gatekeeper mapping

Adding field boundaries

Field boundaries form the basis of Gatekeeper mapping. There are two ways to add field boundaries, depending on what data you have available.

To import RPA field boundaries

Please refer to our quick start guide, [Importing RPA boundaries into Gatekeeper](#) – click to access, or find the same link through the Gatekeeper support centre on our website.

To import generic format field boundaries

Farm Mapping Lite customers may import field boundaries in any of the following generic file format types:

- CSV file
- KML file
- SHP file

A 'shape file' is always comprised of at least three separate files: a .shp file, a .shx file, and a .dbf file. You must have all three of these components in order to be able to import a shape file.

The steps below assume you have SHP files to import. If you are using a different file type, you will just need to navigate to a different node at step 2:


1. Go to the devices module









2. From the list on the left hand side, select *Farmplan/Generic > Field Boundaries > Boundary Shape SHP (WGS84)*
3. Click *Device Sync*
4. On the devices tab, you may wish to untick the 'Move source to archive after import' option.
5. Go to the import tab
6. Using the '...' icon next to path, select the folder where your files are saved.
7. Match the files to the fields you want to import them against by double clicking in the 'Gatekeeper destination field' column.
8. A new window will open with the field list on the left hand side: select the required field and click *OK*. When you return to the import screen, your field will have a tick in the 'Import' column.
9. *Optional:* if you need to preview a file's contents to check them, put a tick for that field in the column 'Map Preview' and click *Map Preview*. To close the preview, click *Close*.
10. Once you have matched the files and fields, click *Import with Preview*.
11. You will be shown each boundary in turn; to accept and import, click *OK* and the next field will show.

Mapping tools

The following universal and measuring tools are available to use:

Icon	Name	Function	Use and tips
	Show second library map	<i>Splits the mapping screen in two</i>	Take care to keep cursors on the correct side of screen.
	Save data	<i>Save</i>	Use regularly. Same function as the 'Save' button in bottom right.
	Reports	<i>Run reports</i>	Useful to automatically split maps into field groups.
	Print map	<i>Print map</i>	Useful to split the screen exactly as it appears.
	Copy to clipboard	<i>Copy screen</i>	Copies the visible map window so that it can be pasted into another place.
	Publish map layers	<i>Publish layer to another Gatekeeper user</i>	May be layer including contents, or just layer styles
	Cancel back to last saved data	<i>Takes you back to the last save</i>	Take care – this is not an 'undo' button!
	Scale in	<i>Zoom in</i>	Zooms the map in, focusing on the centre of the screen
	Scale out	<i>Zoom out</i>	Zooms the map out, from the centre of the screen
	Clear measurements	<i>Deletes any measuring lines</i>	Measuring lines are only ever temporary: they will disappear if you close the mapping window.
	Scale to box	<i>Zooms map to box drawn</i>	This tool is not click and drag – click to mark the first corner of the box you wish to zoom to, pull the mouse to draw a zoom box, and then make a second click.
	Measuring polyline	<i>Measure length</i>	To trace an existing line, make sure the snap on and line grabber functions are turned on. You can specify a maximum length of the measuring line under 'Options' in the active tools menu.
	Measuring polygon	<i>Measure area</i>	Freehand draw the area to be measured, or copy an existing polygon by right-clicking inside it and selecting <i>Find complex polygon</i> . Right click again and select <i>Finish this entity</i> . Measured area will be displayed around the cursor if 'Display

			Data' is turned on, and on the active tools menu
	Measuring circle	<i>Measure area of a circle</i>	Enter the radius required on the active tools menu; left click on the map to draw the circle. Area and radius are displayed on the active tools menu.
	Measuring headland	<i>Measure area within a headland or the rest of the field</i>	After you have selected the tool, specify the width, whether you wish to measure inside or outside the selected polygon, and whether you wish to mark the headland or field remainder.
	Measuring parallel line	<i>Measure length of two parallel lines, or area between them</i>	Enter the width that you want the lines to be separated by. For two single lines, select the mode 'Separate parallel lines', for a joined shape, use enclosed.
	Measuring grid lines	<i>Measure grids or multiple lines across a polygon</i>	If using sampling mode: set axis spacing to size of grids required (1ha grids = 100x100m). Offset options control how the grids are placed within the polygon. To measure tramlines across a field, use polylines mode.
	Drag visible map	<i>Click and drag the map</i>	Click once to pick up the map, pull it to move, click again to drop.
	Pointer	<i>Return to pointer tool</i>	

Geoanalysis layers

Geoanalysis layers are designed to display information from the field records on the mapping window. The link between the mapping window and field records for the geoanalysis layers is provided by the field boundary.

Geoanalysis layers can be switched on by selecting them, but their display cannot be edited.

To view a geoanalysis layer

1. Select the layers menu from the left hand side
2. Expand the option *Geoanalysis Auto 2020* (the year depends on which cropping year you are in)
3. Select from the available options

To print or save a geoanalysis layer

1. Switch on layer as required (above), and switch Bing backdrop on or off as desired
2. To save or print the map as it appears on the screen:
 - a. Click 'Print Map'
 - b. Add map title if required, and select appropriate tick boxes to include or exclude a map key or other required features
 - c. Click 'Save' or 'Print'.
3. To save or print the map auto-zoomed by field group:
 - a. Click 'Reports'
 - b. Select from portrait or landscape options on left hand side
 - c. Select appropriate tick boxes and selectors to include or exclude map scale or other features
 - d. Tick 'Select all' field groups, or select field group(s) to be presented
 - e. Click 'Run Report'
 - f. Save or print as required.