Quick Start Guide to PTMapper 5

Mapping Software for Arboricultural Consultants

Tasks Covered

This Quick Start Guide has been designed to cover the most common tasks
We have tried to keep the task instructions simple yet effective

1. Terminology

- **Layers** = The map items or map detail listed vertically in the left hand column

- **Clicking** = Unless stated, this will always be with the LEFT mouse button

- **Buttons** = icons to click on, mainly along the top of the screen e.g. **Add Title Box**
-
- **Menu** = The list of text options above the buttons at the very top of the screen e.g. **FILE**

- **Pencil** = The active layer. Anything drawn on the map e.g. a line or shape, will be created on the layer that the Pencil is on

- **Locked/unlocked layers** = every layer has a **padlock** symbol. By clicking on the **padlock** you can lock (green) or unlock (red) each layer. Map items that are locked cannot be modified

- **Deselect Button** = The Deselect button is the most important button on the screen

  It has two functions:

- a) It deselects the current action e.g. **Move**, **Delete**, etc.
- b) It deselects any item(s) on the map that you have currently selected e.g. a building or field

Once you have finished doing anything on the map, always remember to click the Deselect Button..!

2. Opening, naming and saving a map

PTMapper opens, names and saves maps in the same way as any other Windows program

Double click the PTMapper icon on the desktop to start the program

Opening and saving a map

Select **FILE** (Top left hand corner)

Select **OPEN MAP** from the list

Browse to a map file - This will be personal to you - e.g. C:\My Files\My Maps\Mymap2013.mpd)

PTMapper map files end in .MPD - the map file symbol is the same as the program icon (shown above)

Double click on the map file (e.g. Mymap2013.mpd) or click on the file and then click OPEN

Save the map by clicking **FILE>SAVE**

Or click the Save button

**Saving a copy of a map** (e.g. for annually changing plans*)*

Select **FILE**

Select **SAVE AS** and type an alternative name to create a copy (e.g. Mymap2014.mpd)

Select **SAVE**

Note: It is always best to keep a master copy of your map and to only work on <u>copies</u> of this master map. This way you have a saved master copy to return to should anything go wrong. The above instructions will help you to do this.

3. 'Safe Mode'

The map will be in 'safe mode' when the Map Layers list looks exactly as shown below:
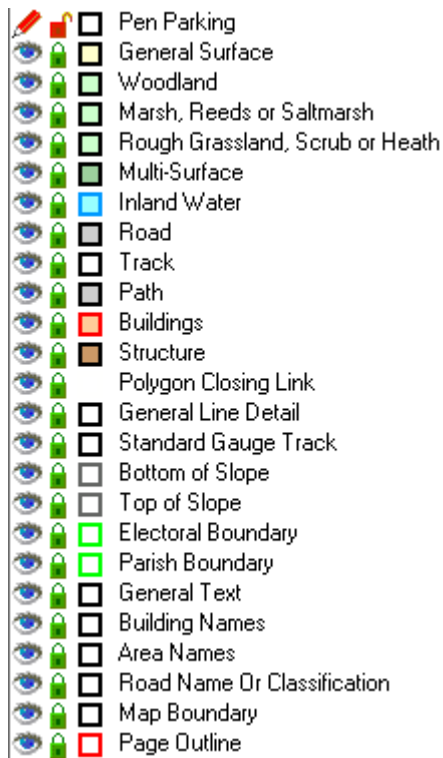
- The Pencil is next to the "Pen Parking" layer
- All the **Eyes** are highlighted
- All the **Padlocks** are green

To return the map to the above settings

Double click the **Eye** next to the Pen Parking Layer – this will move the Pencil to this layer

Click on the **Padlock** icon next to each layer to make it green - this locks the layer. This icon is also shown in the bottom left hand corner of the screen, this one lets you lock **all** of the layers with a single click

Note: The Page Outline layer is a protected layer so doesn't need to be locked

The map is now in 'safe mode'

The **Eye** symbol next to each layer lets you make that layer disappear or reappear. Click the **Eye** next to each layer in turn

To control **all** layers use the **Eye** symbols in the bottom left corner (see above). Click the full colour **Eye** to make all the layers appear and click the greyed out **Eye** to make them disappear

Note: The layer which has the Pencil cannot be made to disappear and will always be unlocked

4. Navigating around the map

Zooming in to see more detail

Click the **Zoom In** button

1) Single click over the area you want to zoom in to – each click zooms one step further into the map.

OR click the **Zoom In** button and

2) Hold down the left mouse button and drag the mouse to create a temporary box around an area of interest. Release the mouse button when your box covers the area you wish to see in more detail. The screen will snap to the area of interest.
3) Repeat as required.

Once finished click the **Deselect** button

IMPORTANT   Remember to **always** click on the **Deselect** button after you have finished using any of the buttons **or** if you have selected something on the map (e.g. a field or road)

Unless you click on the **Deselect** button, the last button that you were using (e.g. **Delete, Move**, etc) will still be active and also anything that you have selected on the map (e.g. a field) willl remain selected.

Zooming out

Click **Zoom Out** button

Single click over the area you want to zoom out of – continue clicking to zoom further out

To return to an overview of the entire map click the **View All** button

To Pan/Move your view

Once you are zoomed into the map you can then move your view in any direction

To do this click the **Pan** button

Place the mouse pointer over the map then click and hold down the left mouse button

 While continuing to hold down the mouse button you can now bring more of the map into view

Overview

If you get lost while moving around the map, or if you just want to return to an overview of the whole of the map, then click the **View All** button

This snaps to a view of everything that is on the map

To find a road or street

PTMapper has a handy road and street finding tool called Streetfinder

To use this, click on the **Street Finder** button

The Layers List box on the left will change to show a list of street names

Start typing a street name at the top of the list or scroll down the list to select a road or street name. The map will jump to the relevant road or street and highlight the name

NOTE: Longer roads and streets often have more than one entry. So try each one in turn until you recognise the area of interest

If you are near to where you want to be then use the Pan tool to "fine tune" your view

5. Adding and personalising map layers

Note: Maps supplied by Pear are taken from Ordnance Survey data. In most cases it is advisable to add your own layers of information rather than modifying the existing layers created by Ordnance Survey

Adding a layer (the example used here is "Grass")

Click on the **Add Layer** button

(You can find this in the row of buttons in the bottom left hand corner)

This adds a new layer to the list on the left and displays the "**Edit Layer Properties**" window. Here it allows you to customise the details of your new layer

Things to consider here are:

The name of your layer e.g. Grass - this will appear in the list of layers on the left

Choose the colour of any lines. e.g. for Grass you might want the lines to be dark green

You have options here to change the line style from a plain one to dashed or dotted. You also have options to make lines thicker (to stand out more)

Choose the Fill colour. This is the inside colour that any shape created on this layer will have. e.g. you might have Grass as light green

By default the Fill colour is a solid colour but you have the option to select a hatched style. This would mean that your Grass field would be green hatched instead of solid green

Once you have made your changes click "**OK**" to finish

Things to note: The Pencil has moved to your new Grass layer. If you now draw a shape on the map it will belong to the new Grass layer

To the left of your new Grass layer (on the list of map layers) you will now see a small box which reflects the colours that you chose for the Grass layer, e.g. a Dark green box and light green fill.

When you add a new layer the Pencil ALWAYS moves to the new layer

To move the Pencil to a different layer, double click the Eye symbol to the left of the layer that you want to move to

Editing Layer Settings

If you wish to change the details of any layer then click once on the name of the layer (i.e. the text that says "Grass" in the Layer List on the left) - the layer name will now have a dark blue surround

Right click on the same "Grass" text and then select **"Properties"** from the short list that appears

Make any changes and then click **"OK"**

6. Adding text and symbols

Note: You can place Text or Symbols onto the map using an existing layer or with a new layer

Before starting, either create a new layer (see page 8 for how to add a new layer) OR move the Pencil to the layer that you want the Text or Symbols to appear on

If you are planning to use an existing layer then check that the Pencil is on this layer before continuing (double click the **Eye** next to the layer you want to use)

You are now ready to add items to your chosen layer:

Adding Text

Click once on the **Add Text** button

Type your text in the **'Content'** box that appears on the left

Zoom to where you want to place the item

Click once on the **Add Text to Map** button (This is below the **'Content'** box)

Click on the map where you want to place the text

Click the **Deselect** button

Note: If the text is not in the correct location, this can be moved – See Page 10

Adding Symbols

Adding Symbols is just like adding text, except that the font used is called **'Maps Symbols'**

Scroll down the list of fonts to select **'Map Symbols'** – a box will appear showing the symbols available in the **'Map Symbols'** font.

Click on the symbol you require

Close the **'Map Symbols'** box

If you haven't done so then Zoom to where you want to place the item

Click once on the **Add Text to Map** button

Click on the map at the location where you want to place the symbol

If required then you can change the size or colour of the symbol using the font options

7. Moving, copying and deleting items

Moving items

Unlock (**Padlock**) the layer that you plan to use e.g. Fields

Click on the object e.g. field, building or text, to select it – this will highlight the item in red

Click on the **Move** button

 Place the pointer over the object you want to move and click to select it again

Hold down left mouse button and move the object

Click the **Deselect** button

Copying items

Unlock (**Padlock**) the layer that you plan to use e.g. Buildings

Click once on the object to select it

From the menu at the top click **EDIT>COPY**

Again, from the menu at the top click **EDIT>PASTE HERE**

Click on the map where you would like the copy to go

If required Continue using **EDIT> PASTE HERE** to place further copies on the map

Click the **Deselect** button

Deleting items

Unlock (**Padlock**) the layer that you plan to use e.g. roads

Click on the object to select it

Click on the **Delete** button to delete it

Or use the delete key on your keyboard

Click the **Deselect** button

8. Drawing shapes and lines

Drawing shapes

There are two buttons which allow you to draw shapes (polygons) on the map. These could be fields, buildings or just to highlight specific areas

Zoom in to the desired area

Click once on the **Draw polygon** button (this allows you create any shape)

Click once on the map at a start point and then continue **single** clicking as you move the cursor around the map. Each time you click on the map it will leave a point (node) and allow you to continue on

Double click to finish your shape and then click the **Deselect** button

The second draw shape button allows you to create boxes or rectangles

Drawing Lines on the map

Zoom in to the desired area

Click once on the **Draw polyline** button

Click once at the start point, move the cursor as far as needed and double click at the finish point

If you need to draw a line of a specific shape then each time you click once on the map it will leave a point (node) on the line and allow you to move on (and change direction)

Double click to finish your line

Don't forget to **Deselect**

9. Measuring areas and distances

Measuring Distances

Measuring distances is similar to drawing a line

Zoom in to the desired area

Click once on the **Draw polyline** icon

Click once on the map at a start point and then move the cursor over the finish point

Notice that as the line continues to extend the figure at the bottom of the screen keeps changing until you stop

Once you stop moving the cursor you can read the distance measured at the bottom of the screen
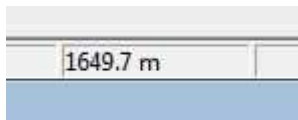
1649.7 m

 In this case the distance measured is 1649.7m

Right click your mouse to cancel the line

Measuring Areas - Land

Click on the **Padlock** next to a layer e.g. Woodland, to make it red and unlocked.

Zoom in to the desired area of Woodland

Click once on an area of Woodland to select it – it will now be outlined in red and the green colour will temporarily disappear.

If you now look to the bottom of the screen you will see the area of the woodland displayed.

2508.1 m   33.27 ha

Here it measures 33.27ha (2508.1m is the distance around the boundary)

If required, then the units of measurement can be changed – Select UNITS at the top of the screen and you can then choose from a list of either imperial or metric for both distances and areas

10. Moving an object from one layer to another

In this example a length of road will be moved from the Roads layer to a layer called Private Roads

This assumes that the layer called Private Roads has already been created (see page 8 to add layers to the map)

Move the Pencil to the Private Roads layer (double click the **Eye** symbol next to the layer)

Unlock the Roads layer (click the **Padlock** symbol to make it red and unlocked)

Zoom to the road that you plan to change

Click once on the **Move Object to current Layer** button

This moves the selected road from the Roads layer to the Private Roads layer

Click the **Deselect** button

11. Importing files from CAD software

Clients may supply you with a site plan based on a CAD drawing to use as either the main map, or as additional reference (e.g. a proposed new building) imported onto an existing map. This may be supplied as either a DWG or DXF file - PTMapper can import a DXF file **but not a DWG file**.

If you are supplied with a DWG file then this will need to be converted to a DXF file before you can use it in PTMapper. If possible, ask the supplier of the DWG file to do this for you.

Importing a DXF into a blank map

Open a blank map, click on **FILE>NEW MAP**.

Import the DXF file by clicking on **FILE>IMPORT>IMPORT DXF FILE.**
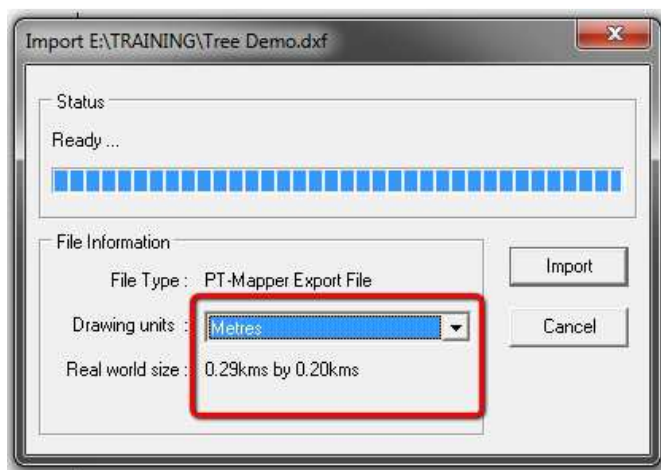
Note the Real World Size (the expected size of the map area) and the Drawing Units. If the Real World Size is significantly larger or smaller than expected then you may need to alter the Drawing Units to suit. e.g. If the Real World Size is far too large then change the Drawing Units to something smaller (e.g. Millimetres). This will then change the Real World Size to a smaller (and more realistic) area.

Once the DXF is imported use the **Draw Polyline** Tool to measure a known length (e.g. the width of a road) to check that the map scale is correct. If it is not correct then close the map without saving and import the DXF again. Adjust the Drawing Units based on the test measurement that you made. e.g. if your road width was far too large then decrease the Drawing Units.

You may receive some DWG and DXF files that are not geo-referenced (i.e. they have no reference to the real world). To check this move your mouse pointer over some of the map detail and look at the grid co-ordinates displayed at the very bottom middle part of the screen. There should be a pair of 7 or 8 digit numbers, if these are much smaller (e.g 3 digit numbers) then your map is not geo-referenced.

If you plan to use this map with a handheld GPS survey device then be aware that you will **not** be able to use the GPS to locate your position.

12. Linking to Google Earth

Note: **You must have Google Earth installed on your computer. If you require help or advice to install the free version of Google Earth then please call us for assistance: 02392 499689**

PTMapper includes a link to Google Earth to allow you to overlay objects from your map onto the Google Earth imagery

To enable the Google Earth link you must first select an object (or objects) on your map e.g. a field, building, etc.

The **Google Earth** button will then become available

Clicking on the button starts Google Earth and overlays your selected objects onto the Google Earth imagery

Alternatively, you can also draw a shape around a specific area of interest on your map to enable the link button to become available

Google Earth has some simple drawing tools built in which allow you to draw lines or shapes on the Google earth imagery and then copy them back to use on your map in PTMapper

If you would like assistance in how to use these then please call us : 02392 499689

13. Cutting out a section of a map

Every map has a Page Outline (at the bottom of the list of layers), if you look at an overview of a map by clicking the View All button then you will see the Page Outline somewhere on the map. It is shown as a plain black box with a dotted box inside (the dotted box represents the page margins)

You can use the Page Outline to create smaller maps from larger maps (think of it as being similar to how you would use a pastry cutter to cut shapes in pastry!)

Before proceeding note the size of the Page Outline compared to the overall size of the map (In most cases the Page Outline is the same size as the map) and then go to **FILE>PAGE SETUP** and note the scale shown here, e.g. 1:10,000

Zoom to the area that will form your new map

Go back to **FILE>PAGE SETUP** and set the scale to a figure that is closer to the size of the area of interest. e.g. 1:2500

To do this select one of the preset figures from the list or type a suitable figure in the scale box

Ensure the area of interest is in the centre of your screen (use the **Pan** button if required)

Click the **Move Page centre to view centre** button

This moves the Page Outline to the middle of your view - the area within the Page Outline will become your new map

If the area shown within the Page Outline does not cover the area that you need then return to **FILE>PAGE SETUP** and change the scale - if you need a larger area then type a larger figure, if you need a smaller area then type a smaller figure

When you are happy that the Page Outline covers enough of the map click on **EDIT>COPY PAGE**

PTMapper will now create a new map based on everything that is inside the Page Outline

Click on **FILE>SAVE AS** to save your new map

Manually moving the Page Outline

If you plan to create more the one new map using the **EDIT>COPY PAGE** option then you can manually position the Page Outline . e.g. you might need 3 or 4 plans which all need to be at 1:2500 but which need to show different areas of the main map

Once you have set the scale (see above) and created the first new map then just move the Page Outline around the main map as required

To do this, make sure that the Page Outline is unlocked (**padlock**)

Click on one of the Page Outline's corners to select it

Use the **Move** button to move the Page Outline to the new area then use **EDIT>COPY PAGE** as before

14. Adding a BS5837 Legend

PTMapper includes a specific **BS5837 Tree Legend** Tool. This displays a guide to the tree detail that is shown on a BS5837 import. e.g. Root Protection Area, Crown Spread, etc.
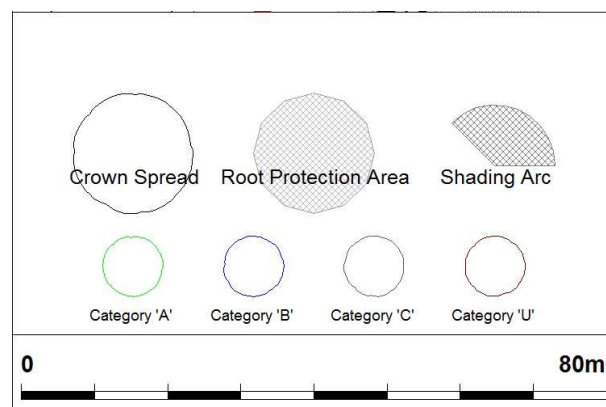
You can find this by clicking on the **Import BS5837 tree data** button

You will find two Tree Legend Templates at the bottom of the screen - Template B shows the various elements of the tree detail as it is shown on the map. Template A shows the detail as an "exploded" view. Select the required template and click **Draw Legend**.
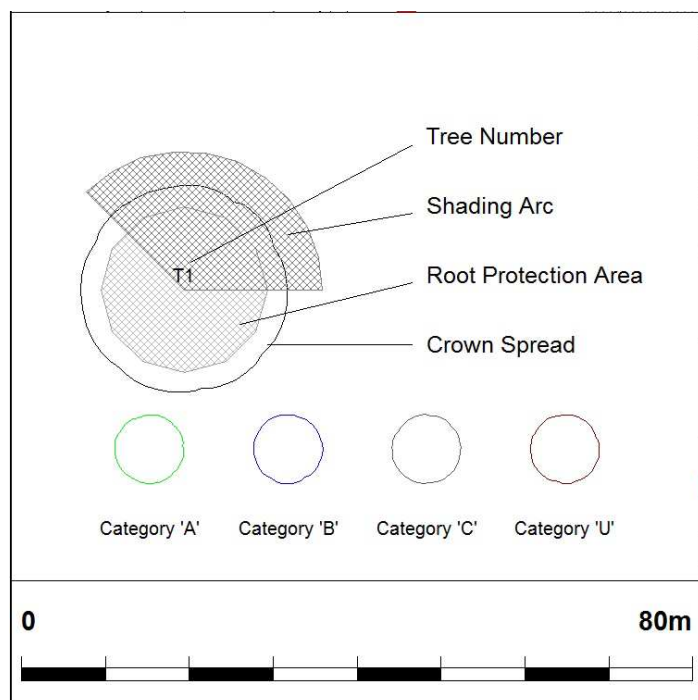
Template A

Template B

If you need to remove the Tree Legend e.g. to change it, then use the Remove Legend button - Do NOT delete it from the map

15. Importing survey files

Survey import options

There are two options to import tree surveys onto a map, depending on whether your survey has been done to BS5837 standard or not. Both survey import options rely on your survey being in CSV file format, typically this will have been created using the PocketGIS data capture software that we supply for use on various handheld GPS devices.
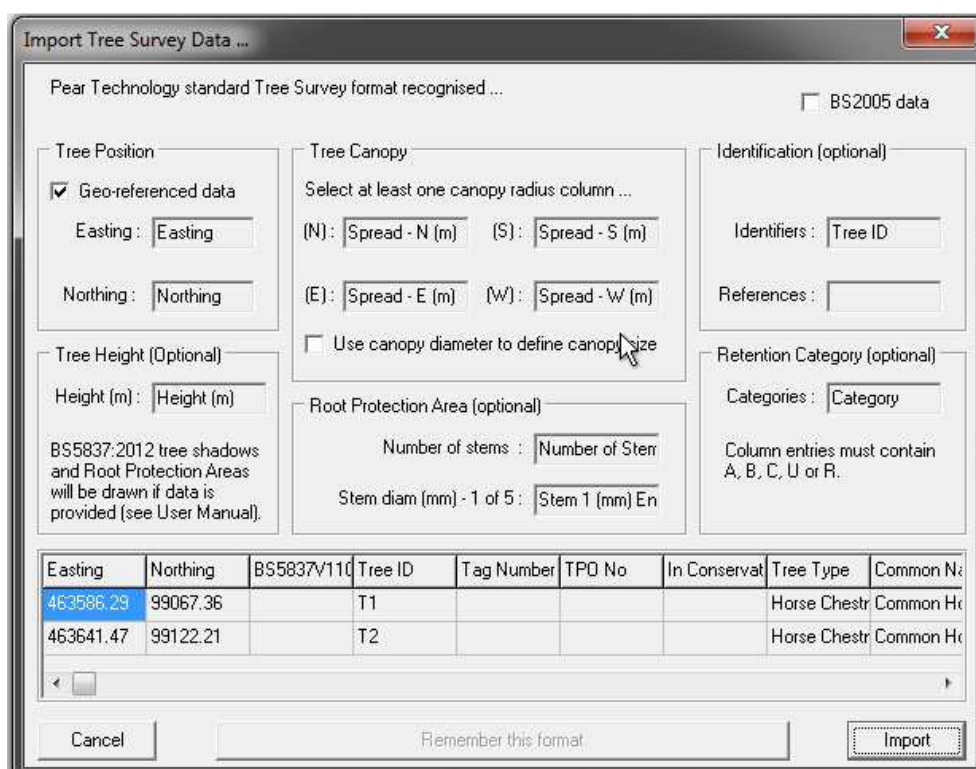
BS5837 tree surveys

To import a BS5837 survey, click on the **Import BS5837 tree data** button

At the bottom of the screen there is a button marked **Import Tree Survey.** Click this to import a BS5837 tree survey.
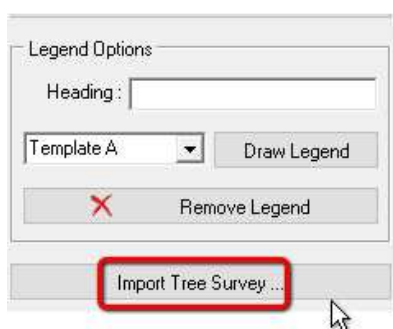
Browse to the relevant CSV file and select it to open. The import screen will display and all fields should already be filled in (see below) so just click **Import**.
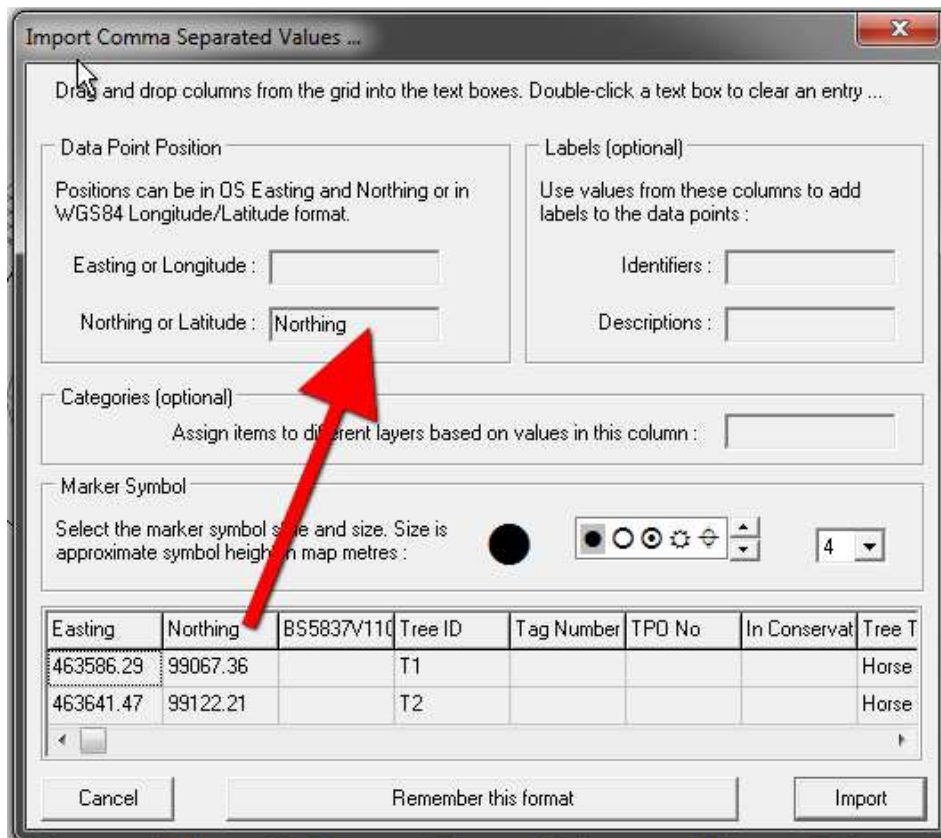
Non BS5837 tree surveys

If your survey does not conform to the BS5837 standard then you must use the standard CSV file import option.

Click on **FILE>IMPORT>IMPORT CSV FILE**

Browse to the survey CSV file and click to open it. The CSV import box will open but all the fields will be blank:

You must now match the column headers from your CSV file to the appropriate fields (e.g. Easting to the **Easting or Longitude** field). In the screenshot above, **Northing** has already been matched to the **Northing or Latitude** field.

To do this, click on a header and drag it into the appropriate field. If you make a mistake then double click in the field to remove it.

The minimum required fields to import information onto a map are - **Easting or Longitude**, **Northing or Latitude** and **Identifiers**. In the example shown above **Easting**, **Northing** and **Tree ID** would be the respective headers to drag into the appropriate fields.

Easting and Northing determine the position on the map of the marker for each tree. Identifiers gives each tree marker it's unique label, as recorded in the Tree ID column in your survey file.

Descriptions is an optional field that can be used to display additional information below the tree marker. e.g. Tree Type.

16. Adding a Title Box

NOTE: When you add a Title Box to your map it will always appear inside the Page Outline

Click once on the **Add Title Box** button

From the list on the left select the correct size Title Box to suit your Page size (check this by going to **FILE>PAGE SETUP** and then look for the **Paper Size**)

Below the list there are a group of four buttons, these allow you to place your Title Box in one of the corners of your Page Outline

Adding a Title Box also adds four new layers to the map. One of these new layers is called 'Title Text' and will already be unlocked. This is to allow you to personalise the Title Box to display your organisation contact details, map name, reference, etc.

Once you have personalised the text you can save the Title Box as a template to re-use later

To do this click on the **Add Title Box** button and click on the **Save Title Box as Template** button

If you need to remove a Title Box from a map then click on the **Add Title Box** button and then use the **Remove Title Box from map** button to remove it from the map

Do **NOT** delete the Title Box from the map as you would with a map object

If you would like to include your organisation's logo or crest in the Title Box then please call us for assistance - 02392 499689

17. Adding a legend or key

Click on the Legend button

The Legend options appear on the left side of the screen

Select the map layers that you want include in your legend (hold down the Control key on your keyboard to be able to select more than one layer)

Give your Legend a Title and then click **Draw Legend**

Use the **Change Legend Width** and **Number of Columns** options to "fine tune" your legend

If you need to remove the Legend e.g. to change it, then use the Remove Legend button - Do NOT delete it from the map

18. Printing

Printing (screenshot)

To produce a quick screenshot of any area on the map, use the **Zoom In** button to show the area of the map that you wish to print

Click **FILE>PRINT VIEW**

The map area shown on screen when you do this will be what you see on the print out

Although this is a quick way of printing a screenshot of the map it still is affected by the Page Orientation and the Page Size, so if your print is Portrait but you want Landscape then change this in **FILE>PAGE SETUP**

The print also takes into account the Page Size so if your map is set to A1 but you want your screenshot to print as A4 then change this in **FILE>PAGE SETUP** before printing

Printing (to scale and with a Title Box)

Sometimes you need to produce a more official looking print e.g. for a client, for a sales brochure or for legal reasons. It might need to be to a certain scale and show important information on the map such as a North pointer, the scale, your organisation details, the date, the name of the location, etc.

The print that you create in this scenario will depend on the information that you set in the Page Setup (**FILE>PAGE SETUP**)

Here you can set the scale, either by selecting one of the preset figures or typing in a suitable number. You can also alter the Page Size so if you have access to a large scale printer or plotter then you can select larger paper sizes to print to e.g. A2, A1 or A0

You can also alter the margin sizes

EXAMPLE

You are working on a project to redevelop a site with some new buildings and have added a large amount of information to your map to show the details of the proposed project. You now need to create a professional print out to take to a meeting as part of the information pack handout

You want your map to be printed on A3 and at a scale of 1:2500

Go to **FILE>PAGE SETUP** and set the paper size to A3 and the scale to 1:2500

Use the **Zoom In** button to set your view to the area to be printed

Click the **Move Page centre to view centre** button

If the Page Outline is not quite over the area then use the instructions on Page 10 to move it

Add the Title Box

Click on **FILE>PRINT PAGE**

Notice that your Title Box shows the date, the map scale and a North pointer