

Slicing Farm Maps and Calculating co-ordinates for resulting images

If you are having problems loading your scanned images into PAM 2000+ or gpMapper the size of the image may be the problem.

When you right click on the image file and select the properties item from the displayed list and the width and/or height of the image is/are over 2048 pixels you will most likely have to have the image 'sliced' and the co-ordinates calculated for the resulting images to import them into your chosen farm mapping package individually.

Pre-requisites for this operation are:

- A scanned bitmap (or similar) image of your property to be imported into your Fairport mapping product.
- Co-ordinates for the image to be sliced (top-left and bottom-right)
- A computer and software for carrying out this operation (using Paint Shop Pro v7)

With this example we will be working with Northings and Eastings (WGS84) and a bitmap image.

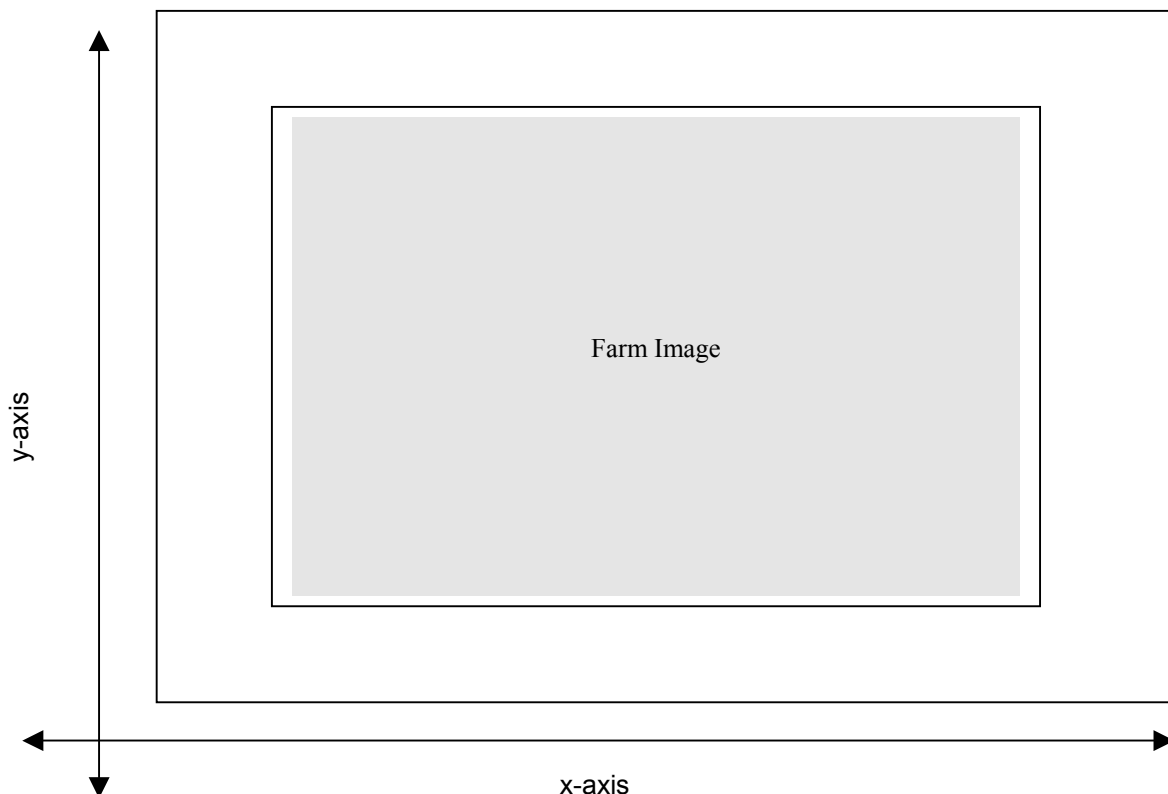
There are 3 steps to slicing the images and calculating the resulting co-ordinates:

1. Calculate the metres per pixel of the image
2. Do the image slicing (Image editing package used: Paint Shop Pro v 7)
3. Calculate the resulting co-ordinates

Step 1: Calculating the metres per pixel of your image

We have a farm image, which is represented below:

Upper left co-ords	x-axis min	= 605000
	y-axis max	= 7450000
Bottom right co-ords	x-axis max	= 610000
	y-axis min	= 7400000



On highlighting the image file and right clicking the image has been found to be:

1000 pixels wide and
3000 pixels in height

With this information we can calculate the MPP (Metres per pixel) need for later calculations.

a)

x-axis max – x-axis min = Width of image in metres

610000 – 605000 = 5000 (This image represents an area 5000 metres in width).

5000 metres divided by 1000 pixels = 5 metres per pixel on the x-axis

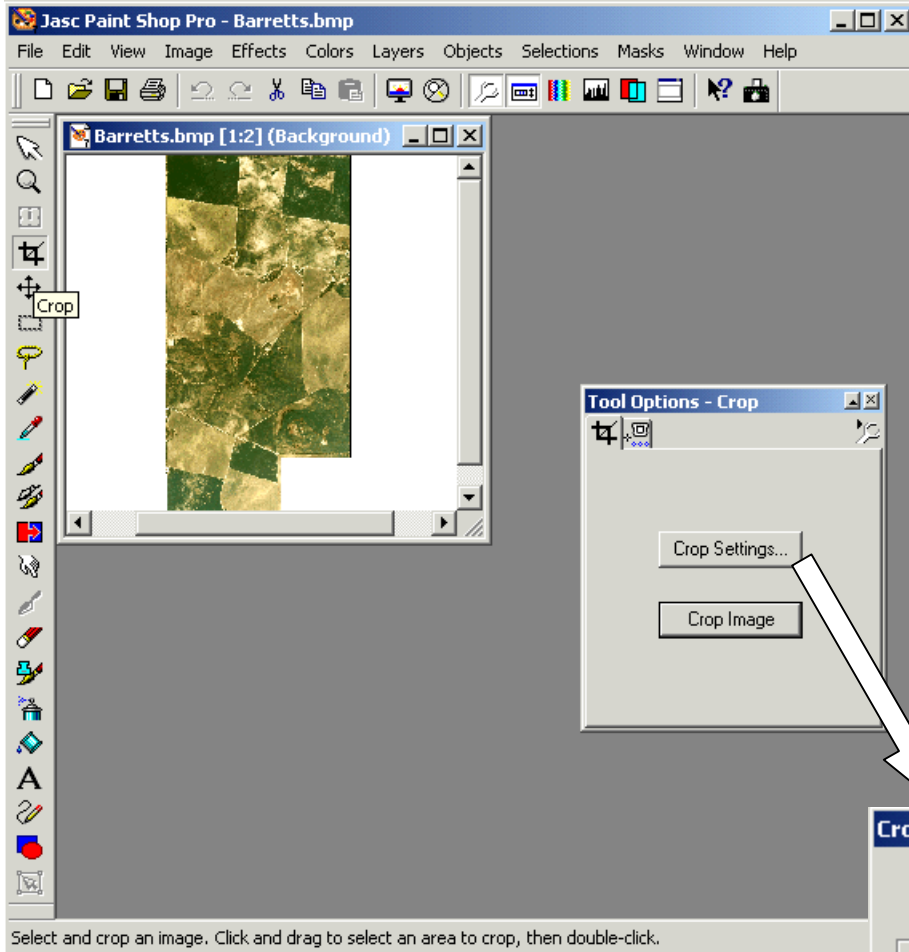
b)

y-axis max – y-axis min = Height of image in metres


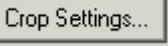
7450000 – 7400000 = 50000 (This image represents an image 50,000 metres in height)

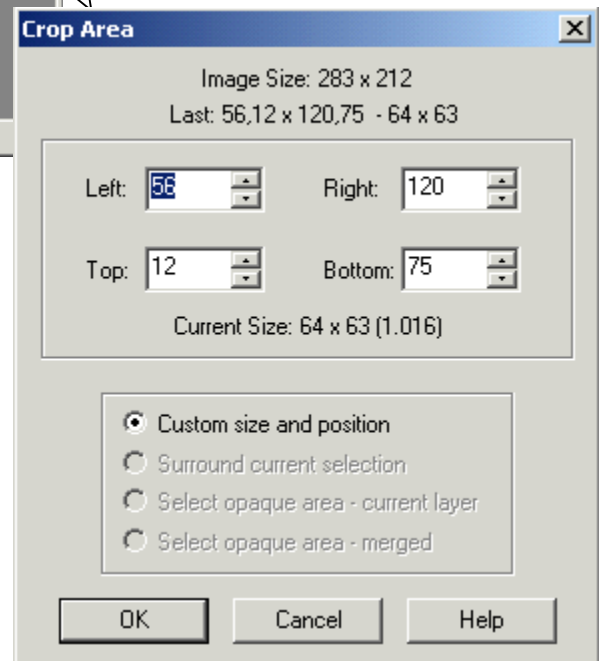
50,000 metres divided by 3000 pixels = 16.666 metres per pixel on the y-axis

Step 2: Slicing your image into manageable pieces



Once you have loaded your image into the image editor (Paint Shop Pro v7 in this case), you go about slicing the image into smaller parts.

- Select the cropping icon on the left hand side of the screen
- By selecting the  button at the top of the screen the tools options dialogue appears
- Select the  button to have the crop area dialogue appear, within this screen you are able to supply the part of the image that is to be kept



Our picture being 1000 pixels wide and 3000 pixels high, the suggestion would be to slice this image into two leaving two images 1000 pixels wide and 1550 pixels high. It is good practice to leave a little overlap (hence the 1550 pixels high) to reduce the possibilities of a gap when the images are imported into your mapping software.

The first image would have the crop settings

Left: 0 Top: 0 Right: 1000 Bottom: 1550 (50 pixels overlap on the bottom)

The second image would have the crop settings

Left: 0 Top: 1450 Right: 1000 Bottom: 3000 (50 pixels overlap on the top)

These images could then be named farm_top and farm_btm or whatever, just so long as you knew which was which when it came to using them.

