

USING WINTOPO FOR DIGITIZING OF BMP IMAGES.

Lesson by Vanessa Page. Copyright Augachel Pty Ltd 2002

Before starting the lesson I will explain the difference between the **Free Version** of Wintopo and the **Professional Version**.

As you would expect the Professional version has a lot more things for you to use. The main difference is the ability to batch convert your images. If you are using the same types of images then you can do more than one at a time. You can fine tune the images better in the Professional Version. You also have the ability to digitize the vector lines over the top of an image. This is useful if you don't want all the detail in the image.

Programs required to follow this lesson:

MS Paint

Wintopo Pro or Free Version

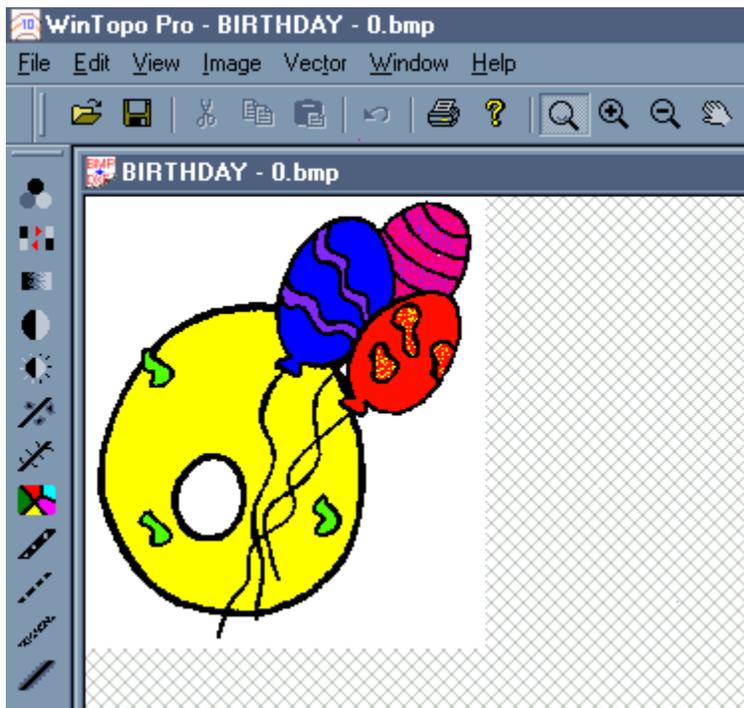
Zoner Draw 4

Brother PE Design.

Open Paint and open the 'Birthday Image 0' from the zip file.

Reduce the size down to approx. 30% This function will depend on the size of the original Image. Save the image as a 24bit Bmp. Close paint.

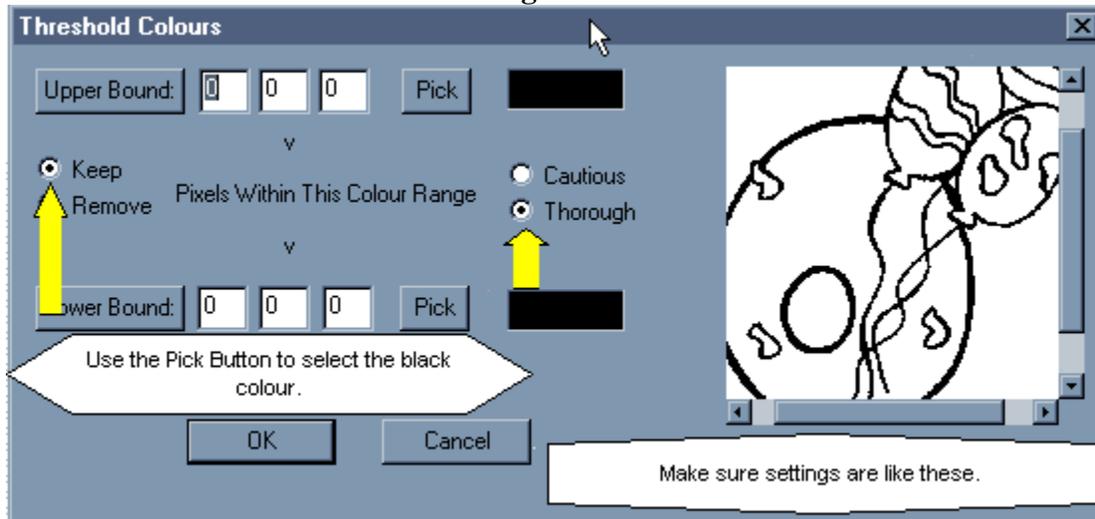
Open the reduced size 'Birthday Image 0' in Wintopo
I am using the Professional Version.



Select Image Thresholding.



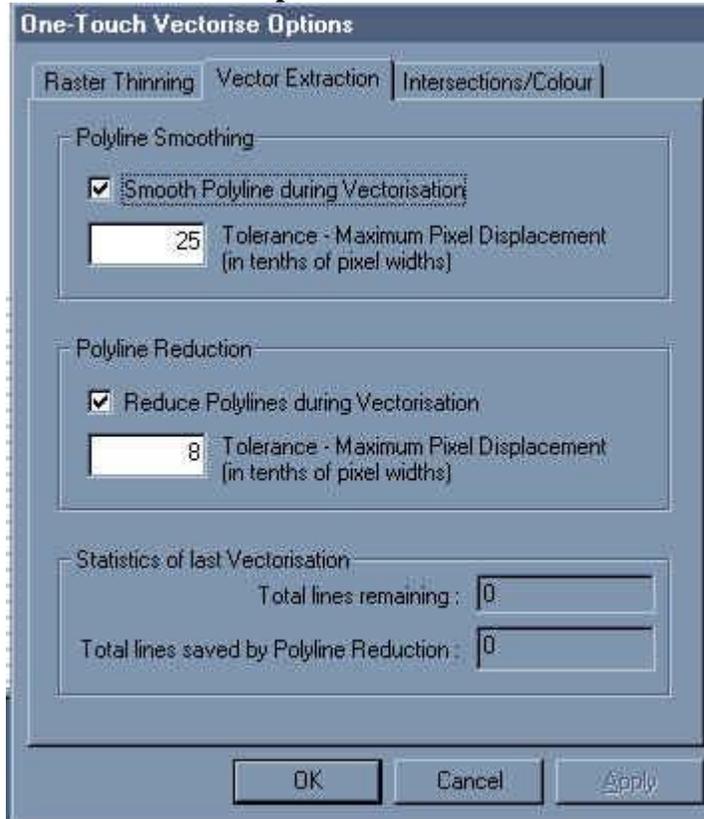
Pick the black colour from the image. This will get rid of the other colours and we will be left with a black and white image. Click OK.



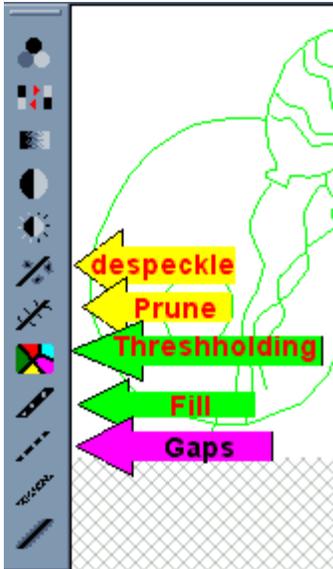
Next Select the BC (Best Combination) on the top Menu.



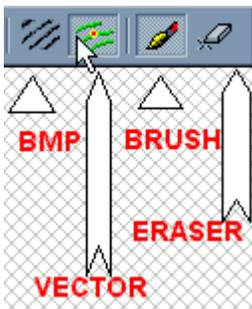
Go to – Vector – Vector Extractions – Vector Extraction Options Menu at the top of the screen. Set the options to these:



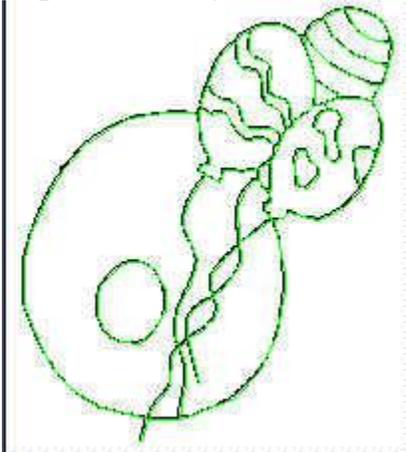
Down the left hand side is a Menu. Click on the despeckle menu and select despeckle. Next click on the Tails Menu and click OK, Next the Fill Holes menu and click OK. Next the Gaps Menu and click OK.



You can zoom in and check for any odd lines or bits you don't need. Use the Eraser or Paint brush to delete and add pixels.



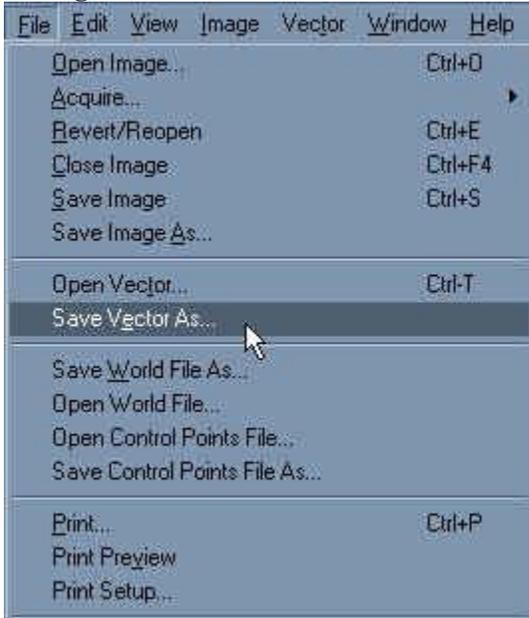
When you are satisfied the image is correct then go to the VE (Vectorisation) on the Top Menu and you will see Vector Lines (green) over the top of your .bmp image.



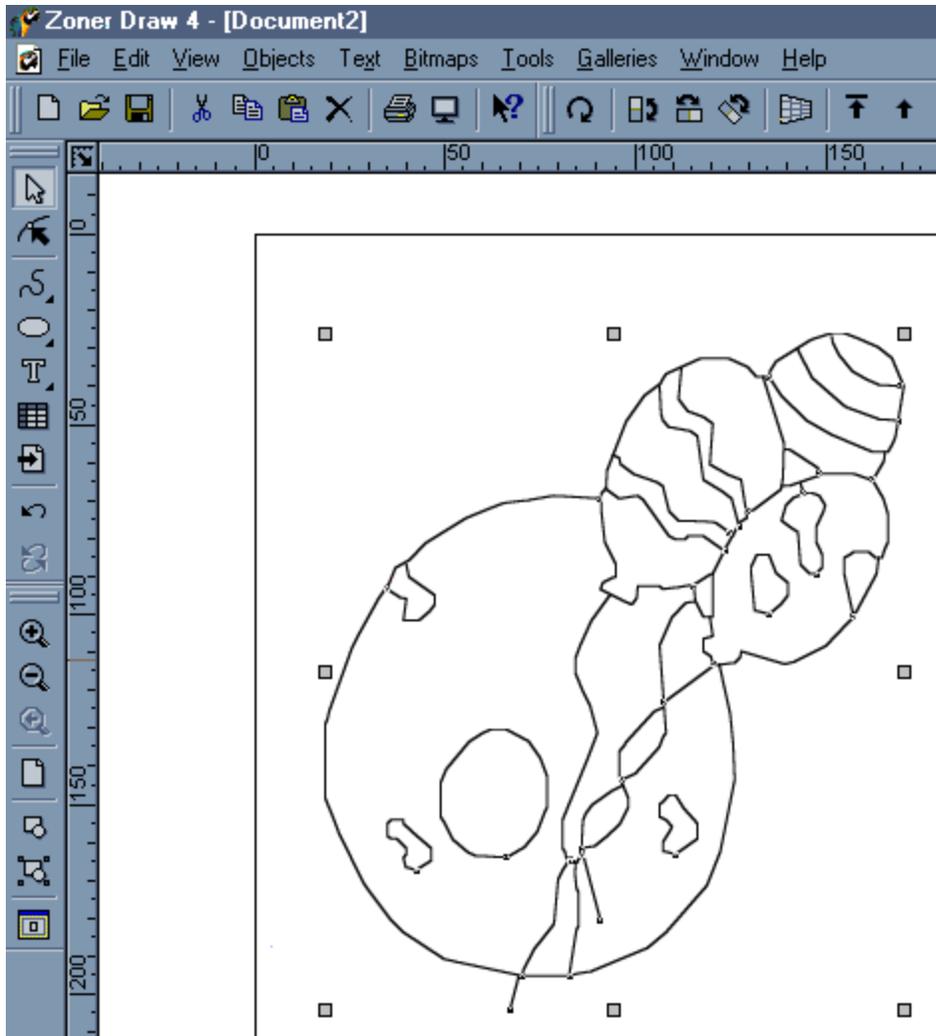
Unselect the .bmp button on the Top Menu and you will be left with the Vector Image.



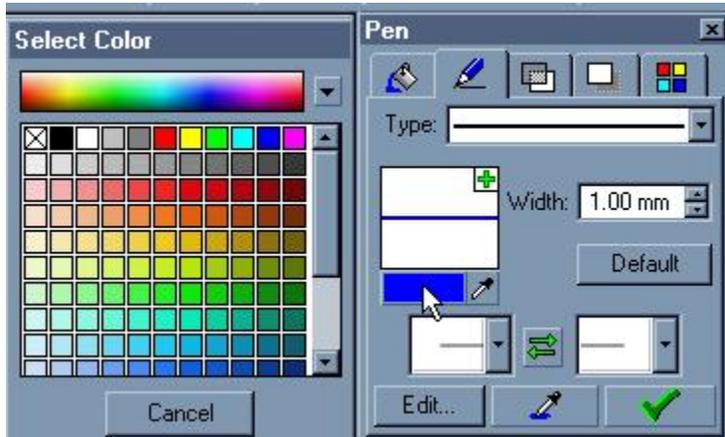
Now go to the Main menu and select File – Save Vector As. Save it as a .dxf File.



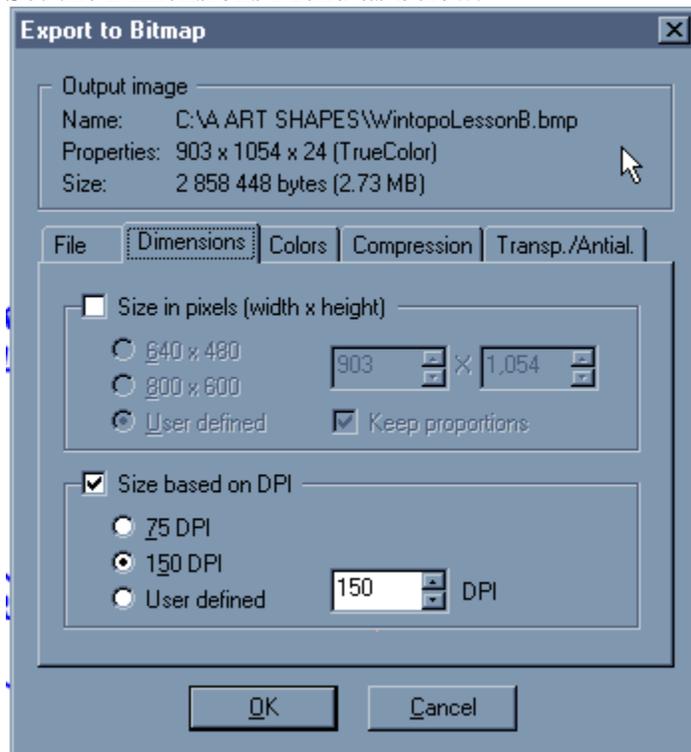
Open Zoner Draw 4 and Import the .dxf File. Drag the cursor across the workspace to get the Image to appear.



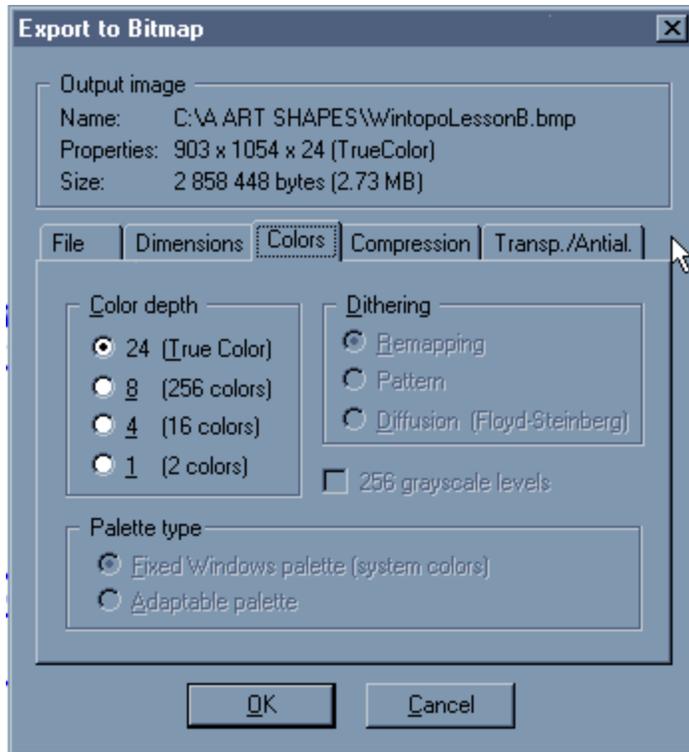
Next go to the Pen Menu and select the blue colour and click on the check mark. Make sure you have the Width set to 1.00mm and the other things set as below.



**Select Control+Shift+E to Export the New Image as a .bmp.
Set the Dimensions Menu as below.**



Set the Colors menu as Below.

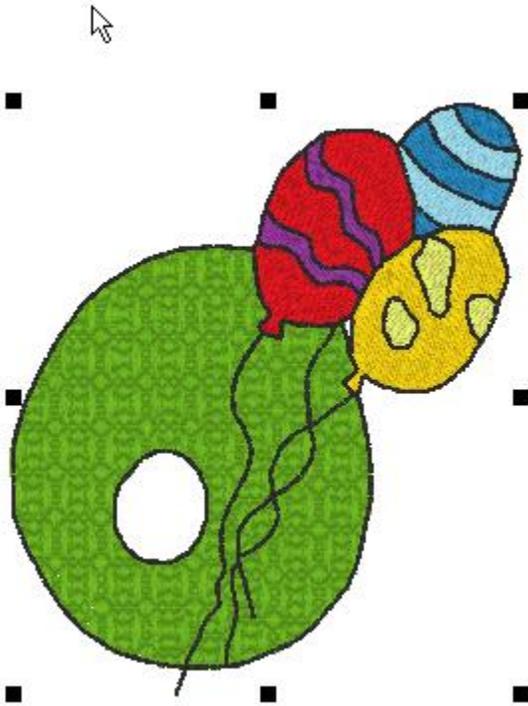


No Compression should be checked.

Open the new .bmp in Design Centre. Go to stage 2 check to see if anything needs fixing. When you are satisfied go to stage 3 and select the blue colour only, select OK.

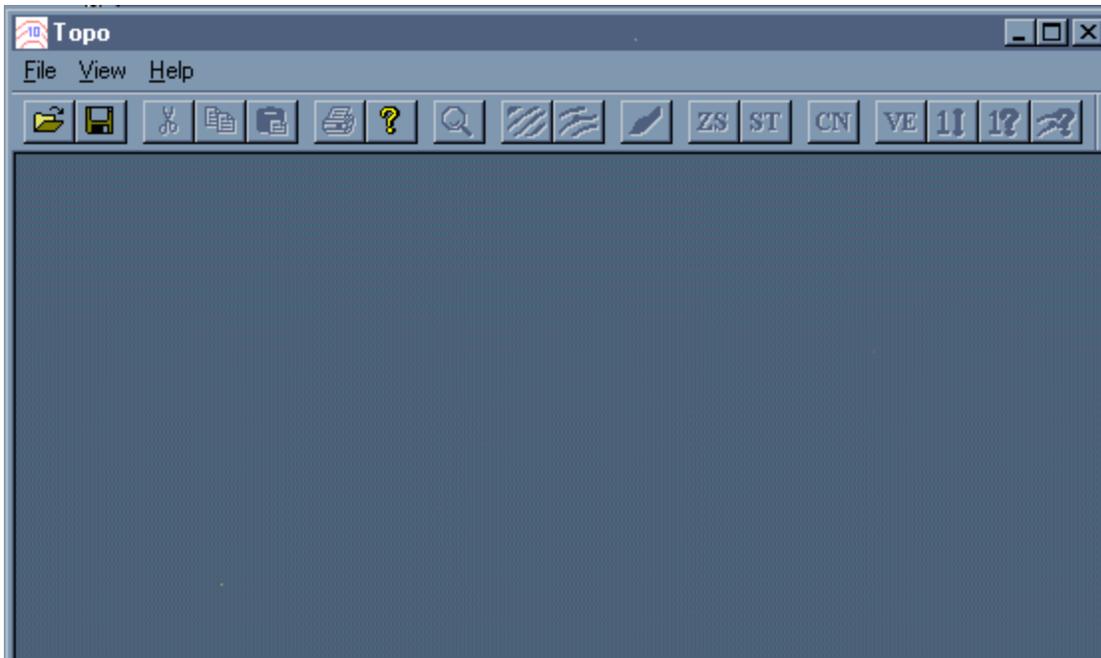
Now finish the design as you would normally.

You can see my finished design below.

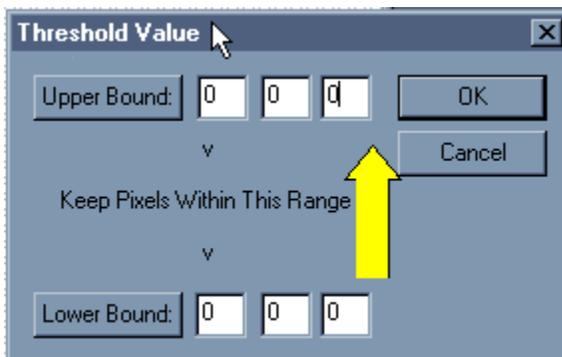


If you have the Free Version of Wintopo some of the menu selections will be greyed out.

When you open Wintopo you will see the following Menu.



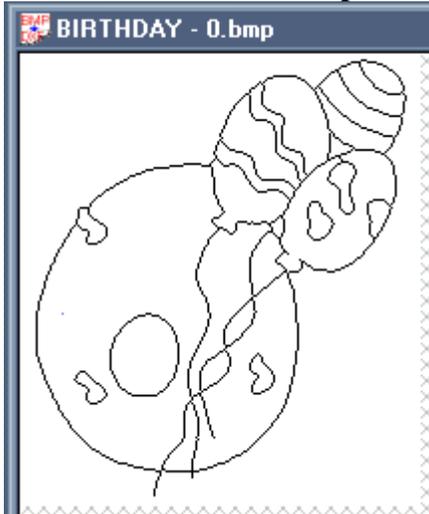
**Open the reduced size .bmp as I did in the above instructions.
Now select Image Thresholding and change the upper numbers to 0 - 0 - 0 as show
below.**



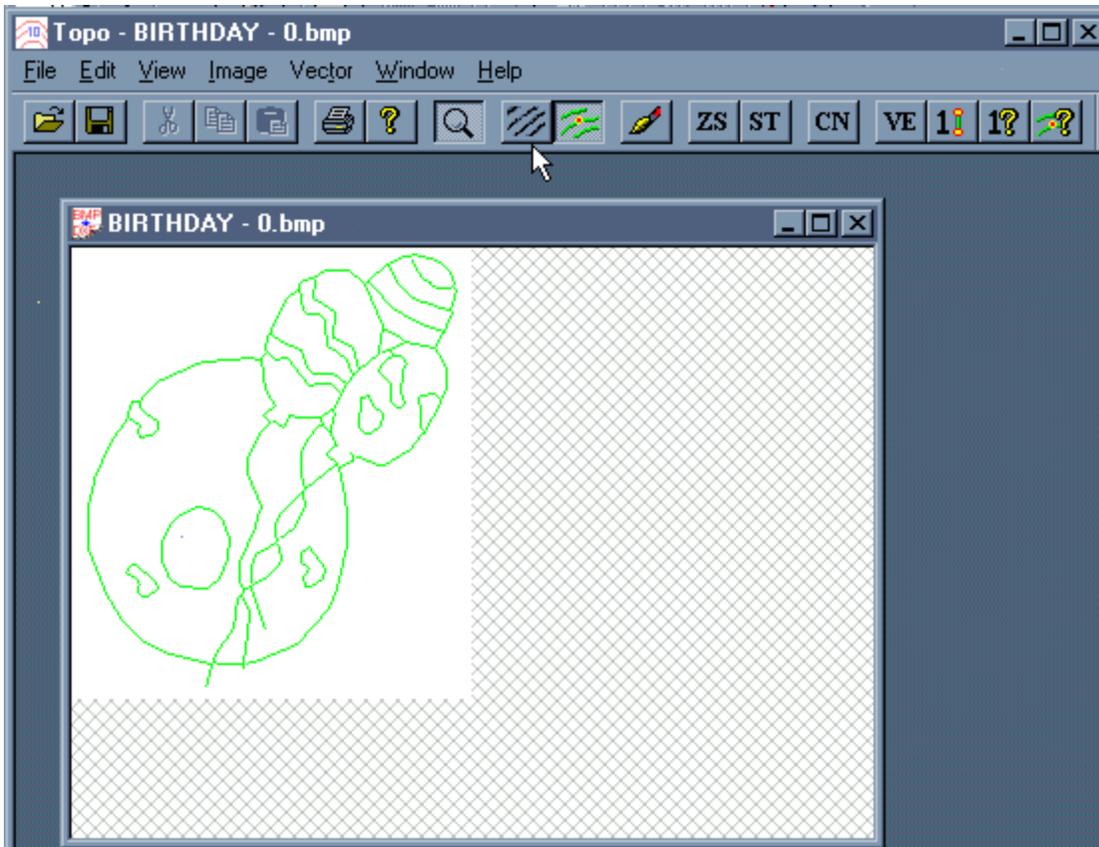
You will see the following Black & White Image now.



Select the ST from the top menu to thin the lines.



Now select the VE from the top menu to Vectorise the Image. Switch off the Bmp button on the top menu and you will be left with the Vector Image.



Now save as a .dxf and open as instructions above in Zoner Draw 4.

Have Fun.
Vanessa

