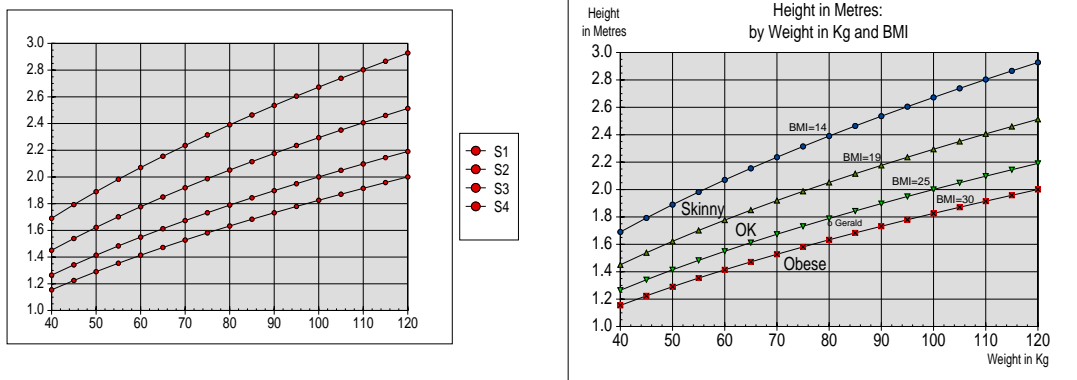


## Gerald's Column - BMI Part 3 by Gerald Fitton

This month I want to get on and finish this set of articles about PipeDream Charts so I'll get straight to it and save my usual digression of a quote or picture until the end.

### Where were we?

In the last two articles, in spite of all the (hopefully) amusing and interesting digressions, we managed to get as far as creating the chart on the left. What we want to do now is change it into the chart on the right.



There are four types of thing we need to do in order to achieve this:

Get rid of the Legend to the right of the chart.

Make space around the chart for the Title and Axis Labels.

Change the shape and colour of the marked points.

Add the blocks of text such as the Title, Axis Labels, "BMI=14", "Obese", etc.

### PipeDream and Fireworkz

Although PipeDream spreadsheets and custom functions can be imported easily (without any modification) into Fireworkz, the two programs treat charts differently. Charts can not be transferred; in Fireworkz you will have to recreate the charts from the spreadsheet data.

Earlier versions of PipeDream did not have a charting facility; PipeDream Charts were a 'bolt-on' addition to the original PipeDream 3 program. Unlike Fireworkz, PipeDream Charts are separate sheets; in Fireworkz the charts are an integral part of the sheet.

During the last two articles I have explained how to create a PipeDream chart from a (separate) PipeDream sheet of data. You can create charts in Fireworkz similar to this PipeDream Chart but the chart is created within the same document as the data. The process of creating the chart is very similar; in particular, in Fireworkz you use the "add to chart" technique to add first the X and then the Y values to include a new line. Some of the details are different but the procedure uses the same sequence of steps.

In Fireworkz once you have created your basic chart, in order to edit it you have to double click on the chart. This point comes up in so much correspondence that I take every opportunity (including now!) to repeat the solution to this problem. In order to edit a chart in Fireworkz double click on the chart! Using the <menu> button gets you nowhere!

A PipeDream Chart is a separate file which must be saved separately from the sheet containing the data and it must be saved with a name which is different from the name of the data file! Once you have created your basic PipeDream Chart (as in the picture on the left above) you have no need to use the sheet containing the data any more and it can be 'iconised'. To 'iconise' a file hold down <Shift> and click on the 'X' at the top left of the file window. The window containing the file will appear to close but a small icon appears at the top right of the screen (on my machine) identifying the iconised file.

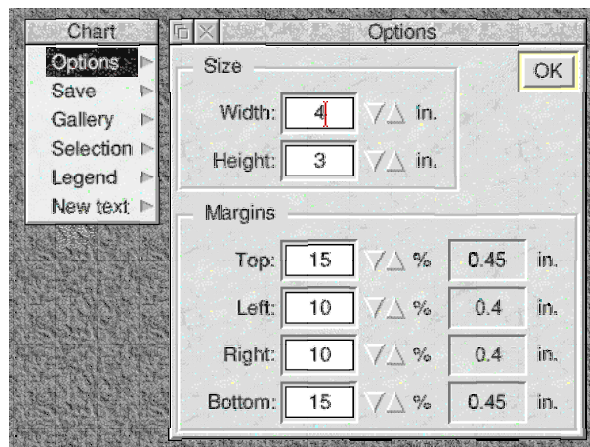
## Editing a PipeDream Chart

The starting point for editing a PipeDream Chart is to place the pointer over the chart and click the mouse <menu> (middle) button. The Chart menu shown below will pop up.



When you do this on the chart with the unwanted Legend (the chart on the left above) then you will find a tick just to the left of the word "Legend" in this Chart menu. Click on "Legend", the tick will disappear and the chart will be redrawn without the legend.

## Making Space



Have a look at the screenshot.

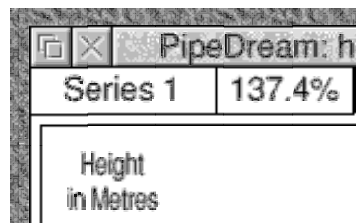
You will see that I have called up the Chart menu and, by running the pointer through “Options”, I have reached the Options menu.

I suggest that you don't bother with “Size” unless you are intending to print directly from the PipeDream Chart file.

What you do need to change from the default values are the “Margins”. In the screenshot you will see the values I have used. I have changed the percentages so that the top and bottom margins are 15% of the total height and the left and right margins are 10% of the total width. Look again at the two drawfiles at the beginning of this article and you will see that the top and bottom margins are visibly larger in the picture on the right.

## Select a Series

PipeDream Charts can be saved as DrawFiles. The two pictures at the start of this article are DrawFiles. The detail below is part of a screenshot so it is a sprite.



Look at the top left corner of the window containing the PipeDream Chart and you will see an empty space where it says “Series 1” in my screenshot. This space is a Radio Button.

As you click in this box you will cycle through all the different components used to create the chart as they are processed by the DrawFile Module (not to be confused with DrawFiles). The title “Series 1” is the name given to the first X-Y block of data used by the DrawFile Module to create the line on the chart for BMI=14 (the lowest BMI).

Now use the <menu> button on the chart (as described above) to bring up the Chart menu. Run the pointer through “Selection” and you will find that you can edit all sorts of things about the way in which this line and the points on this line are displayed (and printed).

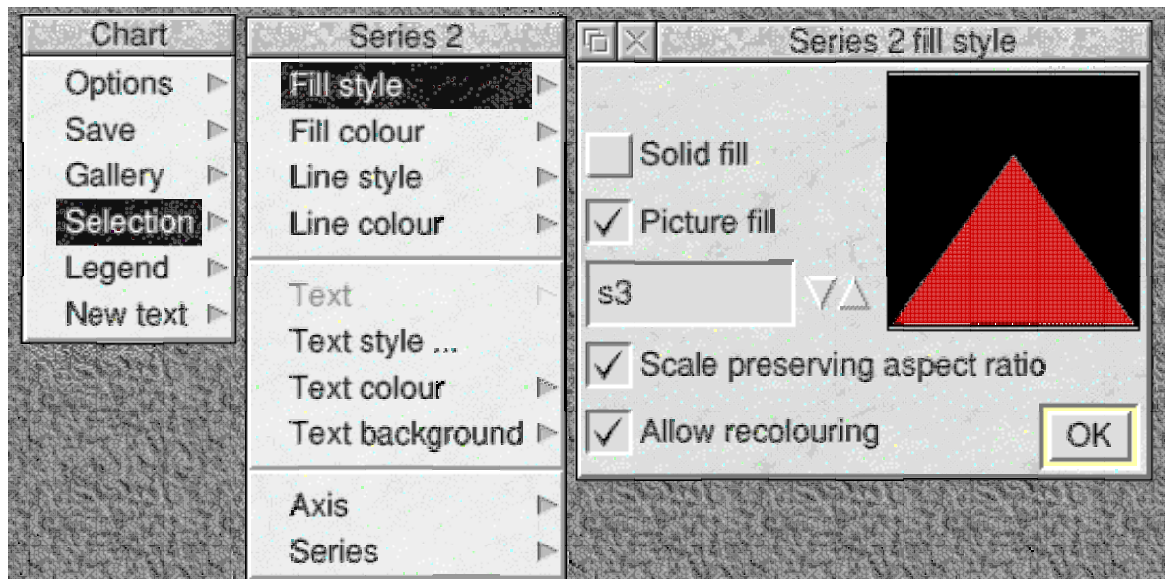
## Fill Style and Fill Colour

In the two screenshots below I have selected different “Series” so that you can see the sort of things which can be changed.

In the first screenshot I have chosen “Fill style” and changed the shape of the ‘dot’ used for the point from the default circle to a red triangle with the point upwards.

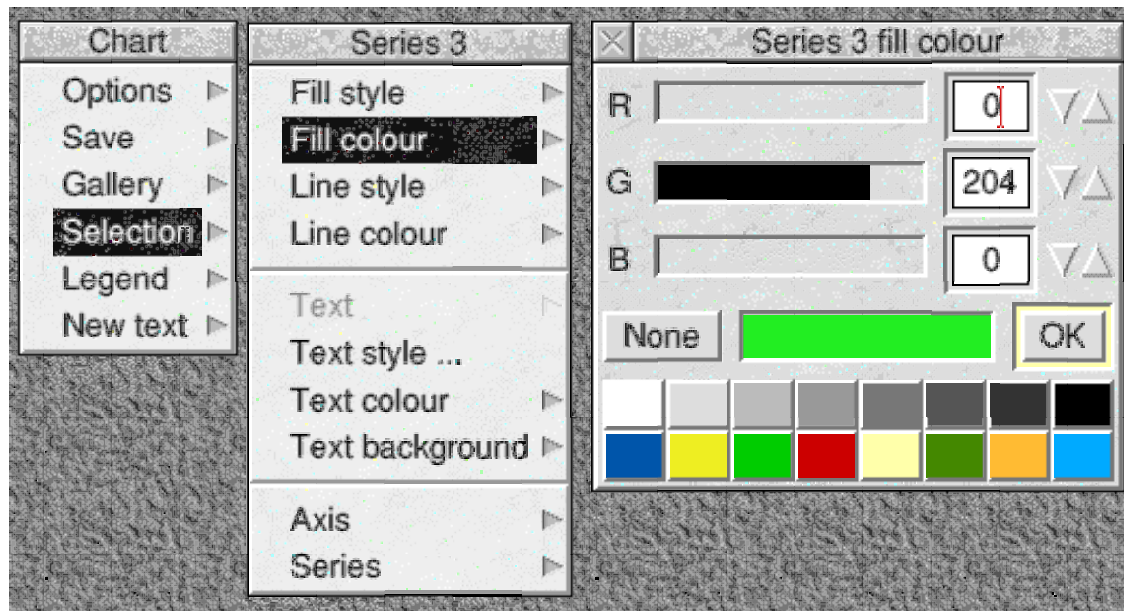
You can cycle through different shapes; they have names such as “s3”.

If you have somehow or other 'lost' all your 'Markers' then I suggest you download the set I am sending to our Editor for him to place on the Archive website. Look in your directory called !PipeDream.Resource and you should find a directory called Markers. Open Markers and you will find some small DrawFiles containing images of the points. If you don't have the full set of six then download a new set of markers from the Archive website.



Please note that "Allow recolouring" is ticked. You need this to be ticked if you wish to recolour the point. We are going to recolour the points.

In the "Fill colour" menu you can select a colour from the sixteen basic colours of the palette or you can define the colour using the RGB part of this menu.



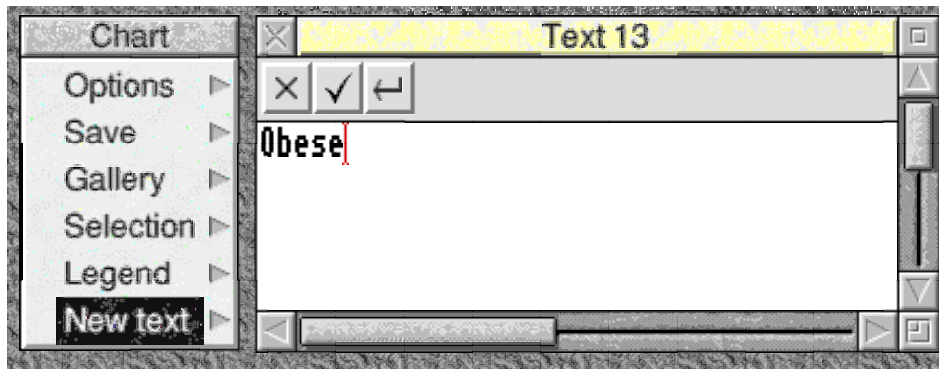
The parts of this menu which start with "Fill" refer to the display of the points. The parts which start with "Line" refer to the line. I suggest that you might like to experiment with "Line style" and "Line colour" so that the line colour matches the colour of the points.

## Adding Text

Nearly there - and no (interesting? - or annoying?) digressions up to now!

The last item in the “Chart” menu is “New text”.

Before you use this menu item click somewhere in the chart. I suggest that you click somewhere near the top of the chart in the blank bit where you want the Title to appear.



When you run the pointer through “New text” you will get something similar to the screenshot above.

An important action to avoid, even though it is instinctive, is to tap <Return> at the end of the first line of a multi-line entry. You will see that the Title is a two line entry. To move to the second line, click on the radio button just to the right of the cross and tick.

When you have completed your entry (you can edit it later if you’ve got it wrong) then either click on the tick or tap <Return>; now you appreciate why you shouldn’t tap <Return> too soon!

The text you have typed will appear on the chart approximately where you clicked (on the blank bit near the top of the chart). It should be ‘selected’ (with a box around it) and you should see “Text 1” in the box at the top left window of the Chart sheet.

If the text is not in the right Style (font and point size), Colour, etc, then you can use the Chart - Selection menu to change these features of your text.

Chart - Selection - Text will allow you to either Edit or Delete the text you have created.

## Moving text

Finally, if the text is not placed exactly where you want it then select it by clicking on it, check that you have the correct selection by looking in the box for “Text 1” and then drag it to exactly where you want it just as you would in !Draw.

You can use Chart - Selection - Text to Edit your text after you have moved it and, if you wish, you can change the colour, point size and font after you have moved it.

## Summary

I find PipeDream Charts much easier to use than charts in Fireworkz. The problem I have with Fireworkz is not so much making the chart I want, but trying to correct any mistakes I make! With a PipeDream chart I find that I can make heaps of mistakes and put them right simply and easily whereas, using Fireworkz I often have to start again!

## Is it Upside Down?

A question for discussion on Archive on Line.

Have I drawn the chart upside down? By this I mean, should I have interchanged the Height and Weight axes? There must be a few Health Professionals amongst our Archive Readership so I ask them: "Is there a convention about this? If so then what is it?"

Whilst I do enjoy getting your correspondence I think that this one is a question for Archive on Line where it will get a lot more airing than if you simply complain to me that I don't know what I'm talking about! Of course I don't know what I'm talking about! Isn't that part of my charm?

## A Question

In my previous two articles I introduced 'digressions' into the discussion.

For example, in the first part of this three part series I included pictures of Venus di Milo and Twiggy as examples of attractive and skinny ladies; in the second I started with a quote from Julius Caesar and included pictures of a Toby Jug and Toby Fillpot as happy but overweight people (like me)!

In this third article (up to now) I have concentrated totally on the technical aspects of editing the PipeDream Chart and refrained from any digressions.

My question is this: "Which, dear readers, do you prefer?" Digressions or 'get on with it'!

Possibly it would be better if you send your replies to our editor, Jim, rather than to me so that you can preserve your anonymity from me! Or, of course, you could bring it up on Archive on Line! But then I might get embarrassed!

## The Healthy Bit

Without doubt I don't find skinny ladies attractive to look at and even less attractive to cuddle. I believe that ladies prefer happy, jolly, slightly overweight men to the "lean and hungry" look of Cassius. More than that, without any medical knowledge whatsoever, I shall assert that I don't believe that a BMI between 25 and 30 is inherently unhealthy.

I instinctively feel that fat around the waist is unhealthy - by which I mean tummy fat. Fat around the hips (particularly ladies) looks and feels good as is exercise and muscle.

However, what do I know? Nothing! So where are you medics? Do you support my instinct or refute it? Let's hear it from you!

## **Now the Philosophical Bit**

Although last month's Archive has been out only a few days, already I have received comments about the bio-bit added by Jim. I have been asked if I will explain what I mean by my First Rule of Gambling, "Never bet on Certainties".

In the interests of brevity I shall make a bold leap to the bottom line (or rather my two bottom lines). The first bottom line is, "Nothing is Certain". The second is that all estimates of a probability, including that most elusive 'Certainty', are relative to the extent of the information known to the person making the estimate. One person's 'Certain Winner' can be another person's 'Certain Loser'; which of these extremes you choose depends on the amount of knowledge you have about the factors influencing the outcome of the event. Probabilities, rather like the concept of 'Absolute Truth' are, at best, relative!

This 'Rule', "Never bet on Certainties", is at the heart of understanding the conditional nature of probability. If you can't, don't or even won't accept it then you will never be able to enjoy taking calculated risks with your money - or your love life! There can be no profit without an associated risk.

Probability Theory is at the heart of many so called Bayesian Spam Filters; understanding the conditional nature of probability is at the heart of the mathematical formulae which go into the design of these filters.

I may deal with this topic in another series of articles (it depends on whether I am encouraged to do so - or dissuaded from doing so) but, for now, I shall leave you to look with some puzzlement at this month's bio-bit and allow you to wonder how it relates to the Risk Assessment course which, once upon a time, I taught at college.