

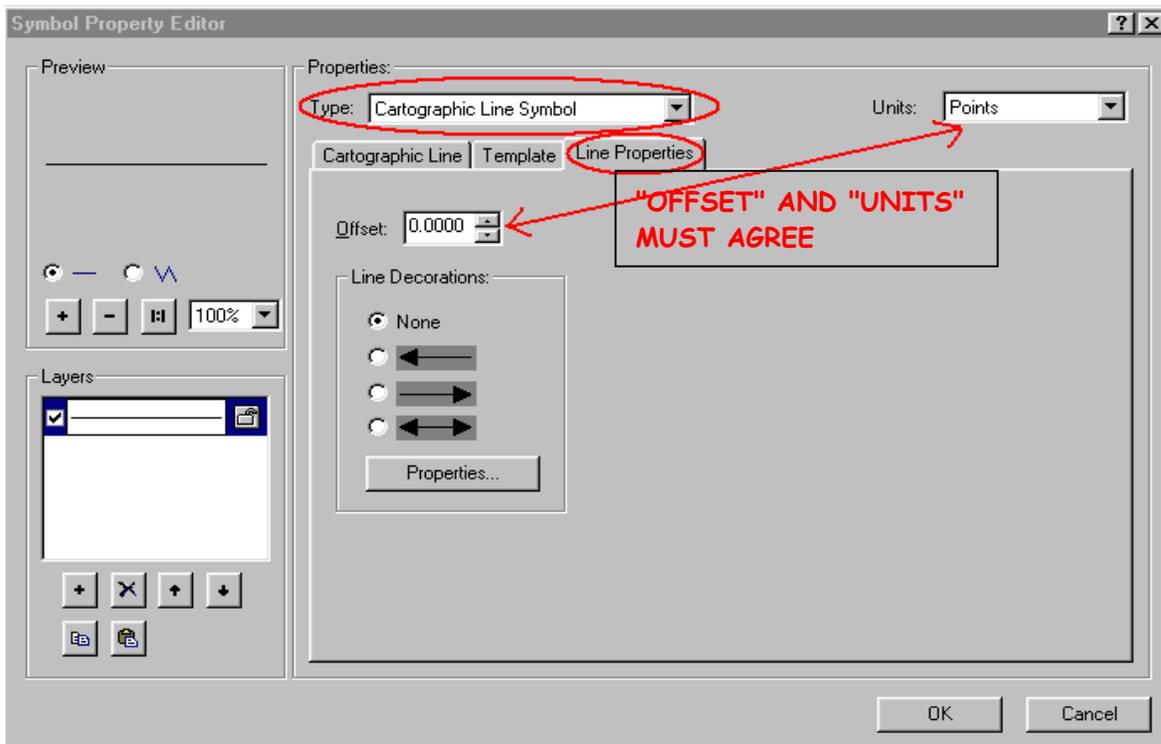
CARTOGRAPHIC TIPS FOR ARCMAP

(or It was a snap in ArcView,
but now I have ArcMAP.....HELP!)

1) OFFSETTING LINE DATA

Open the "Layer Properties" dialogue box for the dataset and click on the "Symbology" tab. Whether you are classifying the your data by an attribute or just using a single symbol, the procedure for offsetting the line is the same. Click on the symbol of the line you want to offset to bring up the "Symbol Selector" dialogue box. Click the "Properties" button.

Change the line type to "Cartographic Line Symbol". Once you do this, the bottom portion of the dialogue box changes to display three tabs. Click the "Line Properties" tab, and viola, there is the offset feature.



Don't forget to take note of the "Units" selector. If you are used to ArcView (which had no selector, but apparently measured in points), and blithely enter 1's or 2's while your Units are inches, you will of course get some undesirable effects!

2) ATTACHING GRAPHICS TO A THEME

In ArcView, a simple selection of "Attach Graphics" directly off of the "Graphics" menu was all that you needed to do to associate labels or other graphics with the dataset theme they were related to. In ArcMap, the process for labels is just as easy, just different.

After adding a dataset to your Data Frame, right click on it in the table of contents and choose "Label Features". This creates what ESRI calls "dynamic labels". Dynamic labels act as a group. You can change the properties of the entire group all at once by altering fields on the "Labels" tab of the "Layer Properties" dialog. However, you can not individually modify a single label in the group - such as shifting it to a slightly different location or giving it a special style.

To do this, you could do what ESRI calls "interactive labeling" which means labeling each item by hand. However, these labels are not attached to the data theme and will remain in the view even when the data theme is turned off.

A better solution is to create ArcMap annotation. Once you have added the dynamic labels, you can easily convert these to annotation. Right click on the theme in the Data Frame table of contents and select "Convert labels to annotation".

In the "Convert Labels to Annotation" dialog box that appears, make sure that the dataset you want the annotation for is selected, and select whatever options you wish below. However, make sure that in the right-hand column under "Annotation Storage Options" you have chosen "In the map".

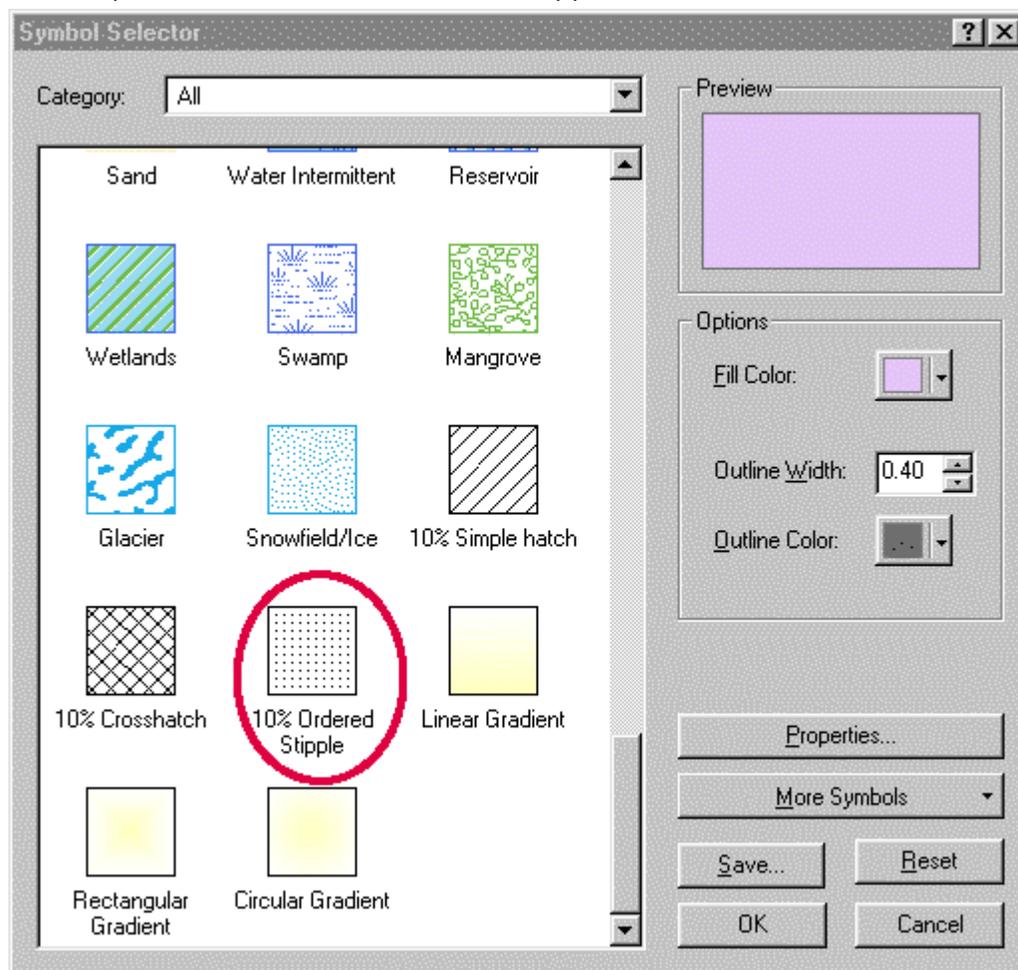
Click the "OK" button and ArcMap creates the labeling (except for any overlapping labels). These labels look the same as before, but they are actually different because you can now select and alter them individually.

To do so, use the "Select Elements" button  on the "Draw" toolbar. Once the label is selected, it can be moved or re-formatted however you desire. Best of all, it and all the other labels are still associated with the data theme, so when the data theme is turned off, so are the labels.

3) USING STIPPLE (DOT) SHADING

In ArcView, the polygon fill options include numerous densities of stipple (dot) shading options. In ArcMap, though, the situation is different, and this tip will detail both how to create the stipple shading and the negative consequences that occur if you inadvertently select certain polygon fill types.

To select polygon fills in ArcMap, right click on the theme in the Data Frame table of contents. Select "Properties" and then go to the "Symbology" tab of the "Layer Properties" dialog box that appears. Click on the rectangle of color that appears under the heading "Symbol" to bring up the "Symbol Selector" dialog box. If you scroll to the bottom of this box, you will see "10% Ordered Stipple" as a selection.

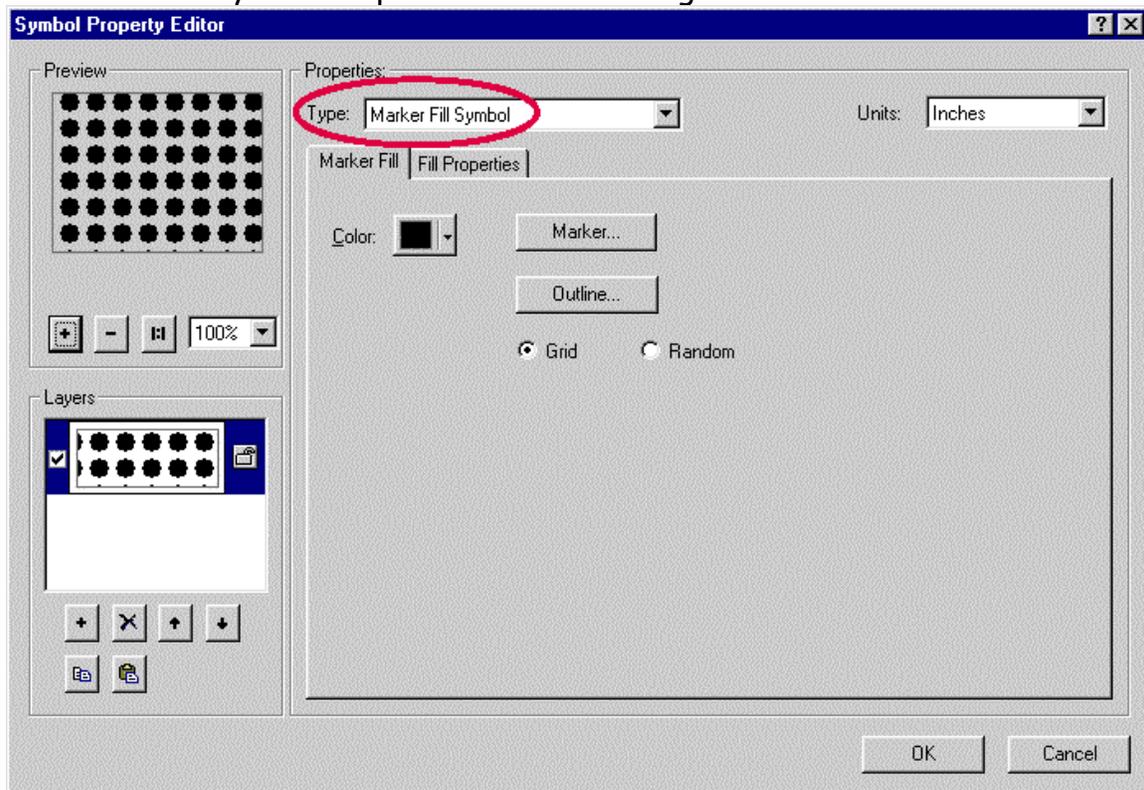


This seems to be just what you are looking for. BEWARE, though, because this symbol is a "Picture Fill Symbol". [To verify this, select the stipple fill, then click the "Properties" button. In the "Symbol Property Editor" dialog box that appears, look under the "Properties:" heading for "Type:".]

Why don't you want a Picture Fill Symbol? Because a Picture Fill Symbol will rasterize every theme appearing below it in the Data Frame table of contents. When you try to plot a layout with a Picture Fill Symbol in it, you will experience the following symptoms:

- Plot generates an enormous temporary file in your designated plotting temp folder
- Plot takes a long time to be received and plotted by the plotter
- Themes below the Picture Fill Symbol theme in the Data Frame table of contents will have:
 - Blocky (i.e. rasterized) lines appearing as "stairsteps".
 - Altered polygon fill colors - the colors in the map area will not match those in the legend.

So instead, create the stipple fill by choosing "Marker Fill Symbol" from the "Symbol Properties Editor" dialog box.



As you see in the "Preview" box, the default gives you something with large bumpy dots. If you want to change this, click on the "Marker" button, and make a new selection. In addition, you can control the spacing of the symbols by selecting the "Fill Properties" tab on the "Symbol Property Editor" dialog box shown above.