

Creating Custom Symbols and Style

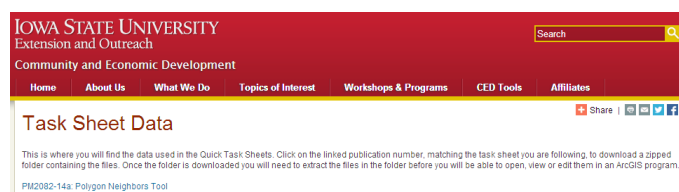
ArcGIS 10.1, 10.2

Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University Geospatial Technology Training Program short course series, “Essential ArcGIS Tutorial Series.” The task sheets are designed to provide quick, easy instructions for performing specific tasks in GIS.

There are two ways to create customized symbols in ArcMap. First, you can modify an existing symbol before applying it to a feature from the Symbol Selector dialog box, and saving it in a style to be reused or shared. You can also create symbols directly in a style using the Style Manager dialog box. This task sheet will demonstrate both methods using the RAGBRAI mapping styles as an example where creating custom symbols and styles might be necessary.

1. Download the Data

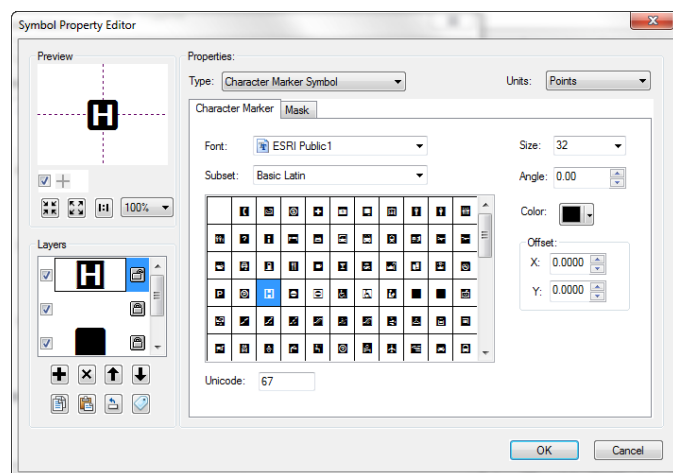
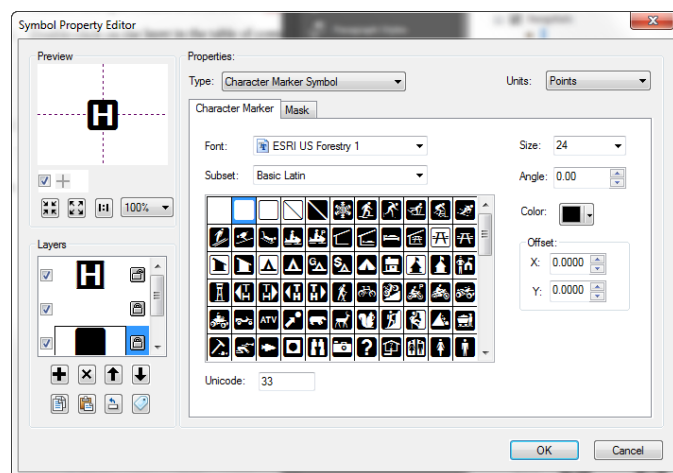
- To download the data used in this task sheet, navigate to www.extension.iastate.edu/communities/gis/quicktasksheets/data in a web browser. Click on the publication number **PM2082-15m**. The shapefile used in this task sheet originates from the NRGIS and can also be found at: <http://programs.iowadnr.gov/nrgislibx/>.



- In this tutorial we will be creating custom symbols to match the RAGBRAI marker styles found in the **RAGBRAI_symbols.pdf** that was downloaded in step 1a.

2. Creating a New Custom Symbol from the Symbol Selector

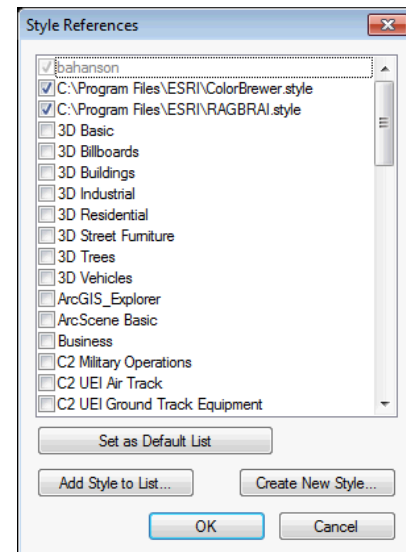
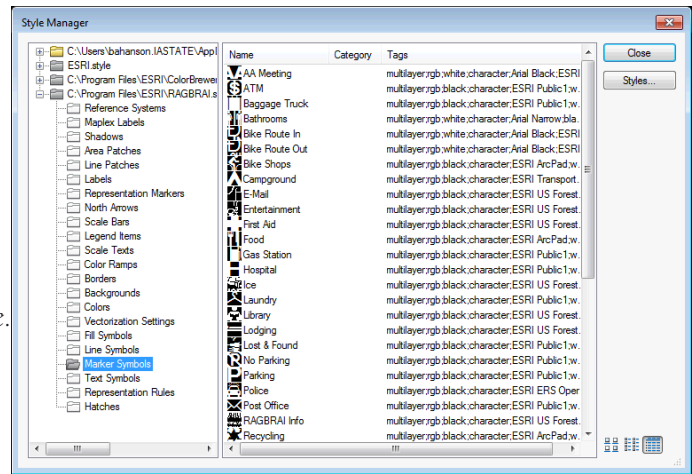
- In a new map document, add the three shapefiles provided in the download. These are **k12schools**, **hospitals**, and **counties**.
- Click on the point symbol for **hospitals** in the table of contents in order to open the **Symbol Selector** window. Click **Edit Symbol**. This will open the **Symbol Property Editor**, here you can edit and preview customized symbols.
- Take a look at the hospital symbol in **RAGBRAI_symbols.pdf**. You will be recreating this symbol.
- In the **Symbol Property Editor** change the **Type** to **Character Marker Symbol** and type **ESRI US Forestry 1** in the **Font** box. Choose the black square icon with rounded corners and change the **Size** to **24**.
- Under **Layers**, click the plus sign to add an additional layer.



- f. Type **ESRI Default Marker** into the **Font** box. Choose the filled in square icon, change the **Size** to **24** and the **Color** to **White**. Add another layer above the two square icons you have already added.
- g. Type **ESRI Public 1** into the **Font** box. Choose the hospital symbol and change the **Size** to **32**. Click **OK**.
- h. Click **OK** to close the **Symbol Selector** window. *Note: click Save As to save the symbol you just created for other use.*

3. Creating New Symbols in Style Manager

- a. Click **Customize** on the menu bar and select **Style Manager**. Click **Styles**, and click **Create New Style**.
- b. Name the new style **RAGBRAI Style**. An item called **RAGBRAI Style.style** will now be added to the left window of the **Style Manager**. Select the style, then in the right window right click on **Marker Symbols** and select **New>Marker Symbol**. This will open the **Symbol Property Editor** used in steps 2b - 2g.
- c. Try the method from steps 2b - 2g, but this time recreate the RAGBRAI school symbol from the k12schools layer. Once you have recreated the school symbol, click **OK**.
- d. Back in the **Style Manager** you should see the school symbol you just created inside your **RAGBRAI Style**. *Note: use Style Manager to create custom symbols and styles that you will reuse often as it is much easier than trying to recreate the symbol each time you need to use it. It is also nice to be able to view and edit all the symbols for each style.*
- e. A complete RAGBRAI.style file was created by Micah Cutler, GIS Coordinator of Hardin County, Iowa and is provided in the download from step 1a.



4. Adding Style References

- a. For more information on adding a style reference to your style list visit the task sheet: *Importing ColorBrewer Style Ramps into ArcMap* **PM2082-14e**.

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