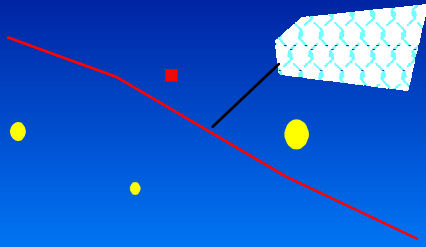


## Files and Symbols

Changing colors, size, and fill



## Some needed terms

- **Base map:** A map containing visible surface features and boundaries, essential for locating additional layers, or types, of georeferenced information.
- **Shape File:** digital vector storage format for storing geometric location and associated attribute information.
  - Contains the spatial data for a single feature needed for constructing maps.
  - .shp suffix and multiple associated files

From USGS and <http://volusia.org/gis/glossary.htm>

## Other needed terms

- **Geodatabase:** A collection of feature classes
  - Can contain multiple shape files
  - Can store labels
  - Can set domains for attributes
- **Layer:** A logical set of thematic data described and stored in a map library. Layers organize a map library by subject matter, e.g., soils, roads, wells, and extend over the entire geographic area defined by the spatial index of the map library.

From <http://volusia.org/gis/glossary.htm>

## What is a layer file?

Suffix .lyr

- A layer file is a way of saving changes in the representation of data without changing the data itself stored in the shape file.
- In other words, once you've changed the symbols used to represent a set of spatial data, a layer file is a way of saving those changes.
- However, the associated shape file containing the data must be accessible.

## Dubuque Data

- Check your email for a zip file and exe file
  - ▶ Save them to your Y drive
  - ▶ Extract the zip with Winzip and execute the exe
- Open ArcMap
  - ▶ Choose "A Template" -> LetterLandscape.mxt
  - ▶ Double click to change the title to "Dubuque South"
  - ▶ Right-click layers; choose properties -> coordinate system -> predefined -> geographic coordinate systems -> North America -> North American Datum 1927
  - ▶ Click Add data; choose dubuque.shp

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## Dubuque Data

- Open ArcCatalog
  - ▶ Find dubuque\_south\_ne.sid
  - ▶ Right-click on it and choose properties -> general -> spatial reference -> edit -> projected coordinate system -> UTM -> NAD 1927 -> zone 15
- Switch back to ArcMap
  - ▶ Add data
  - ▶ Pick dubuque\_south\_ne.sid
  - ▶ Right click on it and choose zoom-to-layer
  - ▶ Move it to the top in the layer list
  - ▶ Right click -> properties -> Display -> Transparent -> 50%

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## In class

- Work through chapter 5.
- When you finish part 5d, do not close it. Instead,
  - ▶ Use Google Earth or a similar program to find Nyeri, Kenya, where I used to live.
  - ▶ Determine its lat and long.
  - ▶ On the map of the Horn of Africa in 5d, see if you can figure out how to plot Nyeri and label it **Dale's Old Home**. (See page 469 forward.)

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