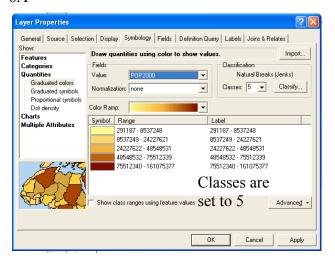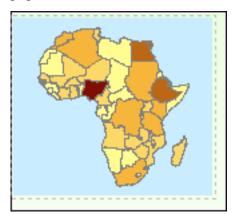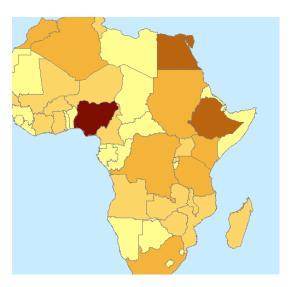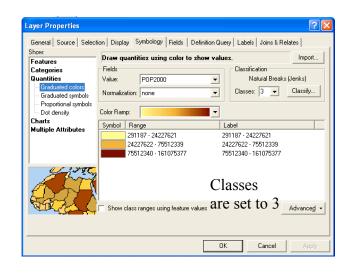**Chapter 6**: Classifying features and rasters
6A

This map is to display population distribution.

Classes are set to 5

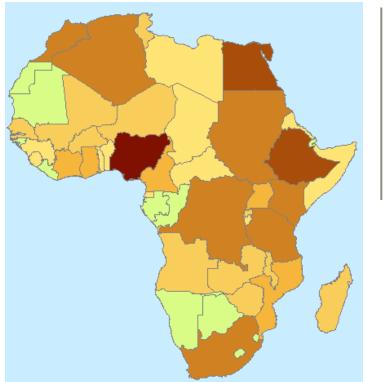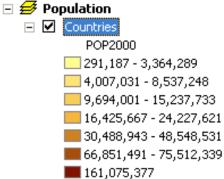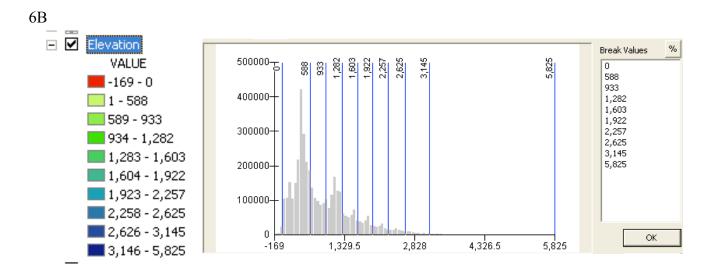Classes are set to 3

When classes are set to 3 the map doesn't have enough classes to properly represent the data

What we will do is increase the classes size to 7, which will represent the data far more dramatically.

Population
- ☑ Countries
  - POP2000
    - ☐ 291,187 - 3,364,289
    - ☐ 4,007,031 - 8,537,248
    - ☐ 9,694,001 - 15,237,733
    - ☐ 16,425,667 - 24,227,621
    - ☐ 30,488,943 - 48,548,531
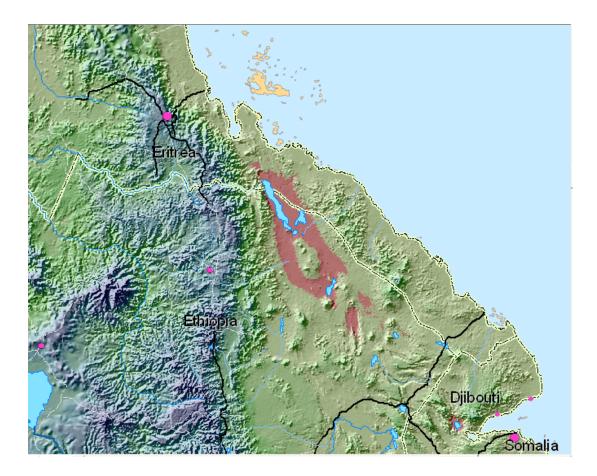   - ☐ 66,851,491 - 75,512,339
    - ☐ 161,075,377

Now we have a much better map, that is represented in 7 different population bands. The lightest yellow on the color ramp was changed to light green to provide better contrast.

6B

Elevation
- VALUE
  - ☐ -169 - 0
  - ☐ 1 - 588
  - ☐ 589 - 933
  - ☐ 934 - 1,282
  - ☐ 1,283 - 1,603
  - ☐ 1,604 - 1,922
  - ☐ 1,923 - 2,257
  - ☐ 2,258 - 2,625
  - ☐ 2,626 - 3,145
  - ☐ 3,146 - 5,825

Break Values %
0
588
933
1,282
1,603
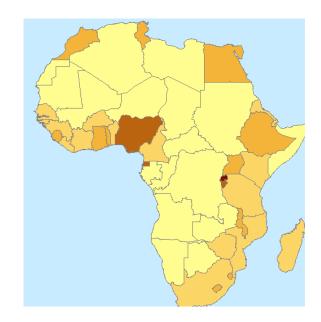1,922
2,257
2,625
3,145
5,825

OK

This map will work with topography. Again the Hillshade and Elevation layers will be utilized. If we only use 5 classes our bottom class in elevation would represent elevation -169 ft. to 442 ft. we would like our map to have the first band of elevation -169 to ground level. You can see in the dialog box above we have set the break values to 0.

The final product we can clearly distinguish the aspects of land that are below sea level (reddish color).

6C

This map will display population density. We will change the layers on the countries layer to dot density which is under *Show: Qualities* We will use the POP2000 field as it is the latest. We can experiment with the dot densities to see how our map will look.
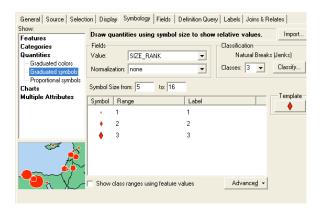
The above examples show how varied adjusting the dot value can cause the map to change. On the left a dot represents 2,000,000 people while the right map a dot will represent 750,000 people. The dot size was maintained at a standard 2.
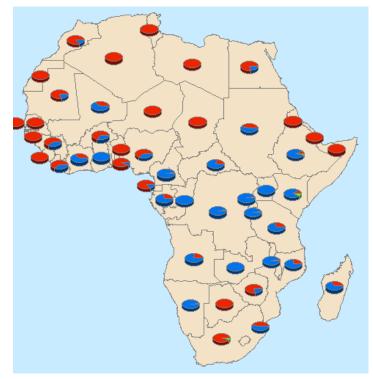
6D

Above we can see Qualities are chosen and the Graduated symbols are chosen. There will be 3 size of dots.
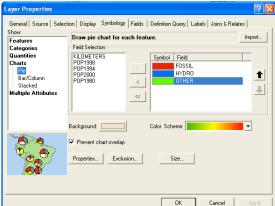
We changed the map to a yellow diamond symbol to represent the size of the diamond mining operation. They represent the three sizes of diamond mining operations.

As you can see our last map deals with sources of energy. The will be represented with a pie chart representing fossil fuel, hydro electric power and all other types of power. We change the color to for better representation.

Pau!