

Introduction to ArcMap part II

Queries:

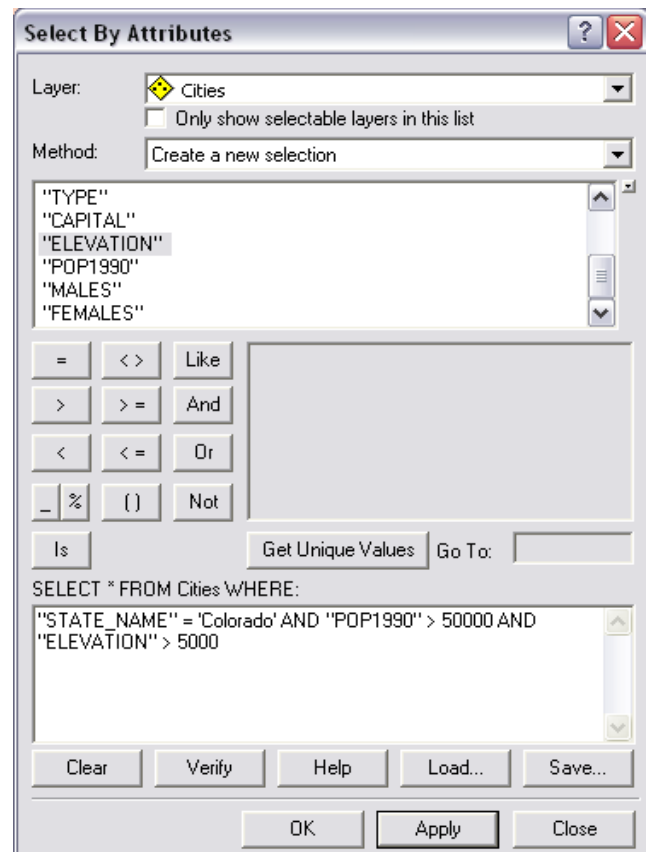
Always use the mouse to build your query unless you are typing in a specific numerical value that is not in the attribute table. Do not put numerical values in quotes.

Remember: double click to select the field from the attribute table (in double quotes); single click the operator (=, <>, >, etc.); then click "Get Unique Values"; and finally double click the value from the field (in single quotes).

Here is an example of how to use the logical operator AND to build a compound query to select cities in Colorado with a population over 50,000 at an elevation over 5000ft.

Exporting:

You can export the selected features only from a shapefile by using Right Click>Data>Export Data. If nothing is selected in the shapefile, ArcMap will simply make a copy of the shapefile. Remember to browse for the correct location



Attribute table: Field data types

Fields in an attribute table can hold numbers, text (alphanumeric characters) or dates. The term 'string' is also used for the text data type. The data type is established when the field is created and cannot be changed.

When adding a field to an attribute table, you must select the data type: Short, Long, Float, Double, Text, Date. We will do this in the coming weeks. Below is a table from Arc Help showing numerical data types.

Data type	Storable range	Size (Bytes)	Applications
Short integer	-32,768 to 32,767	2	Numeric values without fractional values within specific range; coded values
Long integer	-2,147,483,648 to 2,147,483,647	4	Numeric values without fractional values within specific range
Single-precision floating-point number (float)	approximately -3.4E38 to 1.2E38	4	Numeric values with fractional values within specific range
Double-precision floating-point number (double)	approximately -2.2E308 to 1.8E308	8	Numeric values with fractional values within specific range

Joins:

Joining attribute tables can be used to append data from one table to another. Joins are done using what is called a 'key'; this is a field that corresponds in both tables. The fields (keys) you use to join the tables must be of a compatible data type. For example, you can join two tables using a LONG from one and a DOUBLE from the other if the values correspond. However, you cannot join a LONG with a STRING (text). A STRING field can only be joined to another STRING field.

Joins are stored in the .mxd; therefore, you must export the shapefile with the join in order to make it permanent.

Projecting the map display (.mxd):

Right click the data frame (labeled 'Layers' by default) and go to Properties (or simply double click on the data frame title)>go to the Coordinate System tab>expand 'Projected Coordinate Systems'>expand 'Continental'>expand 'North America'>Select 'USA Contiguous Albers equal area conic'

