Tip Sheet for Select Query Tools in ArcGIS 9.2

Overview
The ArcGIS methods for selecting features are:

1. Interactive selection by point and click (or draw box) with the select tool – http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=Selecting_features_interactively

2. Select by graphics (use the polygon, circle or other tools in the Draw Toolbar, as seen below) - http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=Using_Select_By_Graphics:


For each of these select functions, you can do the following:

- Create a new selection
- Add to the current selection
- Remove from the current selection
- Select from the current selection

Tips for using Select by Attribute

Note: the Select by Attribute query box is cranky and it wants things typed in perfectly. It works better if you use the character options you see there (e.g., the >, <, AND, OR buttons) than if you type these yourself. If you get an error message, try to see what you did wrong, and try again.

Use the HELP button in the Select by Attribute dialog box for more information on how to perform queries, including wildcard queries (e.g., find all parcels for which the owner name has the word University in it)

When selecting for values within the same attribute field (e.g., select all commercial and residential land use polygons), use the OR function, not AND, as follows:
Note you must also REPEAT the field name (in this case “CLS” has to be repeated twice).

Use the AND function to find two values from two different fields, both of which you want present. E.g., select parcels where land use is commercial AND the building value is less than $100,000:
There are lots of other functions to use for select by attribute. Read through the HELP button and ArcGIS Desktop Help (http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=Using_Select_By_Attributes)

Note that wildcard searches can be performed. In this example of Somerville parcels, the “City” field has the mailing address of property owners, which is a good indication of residents who own property versus out of town owners. Unfortunately there is a lot of variation and errors in the spelling of town names, including Somerville, so selecting by City = ‘Somerville’ doesn’t select all the properties. But we can do a wildcard query as follows – note that the % sign is the wildcard character for shape files:

```
SELECT * FROM Parcels2004 WHERE "CITY" LIKE '%som%'
```

Tips for chaining selections as part of a larger, longer query
If I wanted to select from already selected parcels (those that are commercial with a building value < $100,000) all those that are within walking distance of a park, I could use the select by location function as follows (note “select from currently selected features in”):
Finally if I wanted only those commercial, less than $100,000 buildings close to large parks, I would:

1. Add an park_acre field to parks (type double, precision and scale both 0):

2. Right-click on Park_acres and choose Calculate Geometry to calculate the area in acres (you have to have write access to the file to do this):

3. Select by Attribute for all parks > 5 acres
4. Then you can select by location all the parcels that met our previous criteria and that are within 1500 feet of the selected “large” parks – note below how we check mark to use the selected features of parks: