


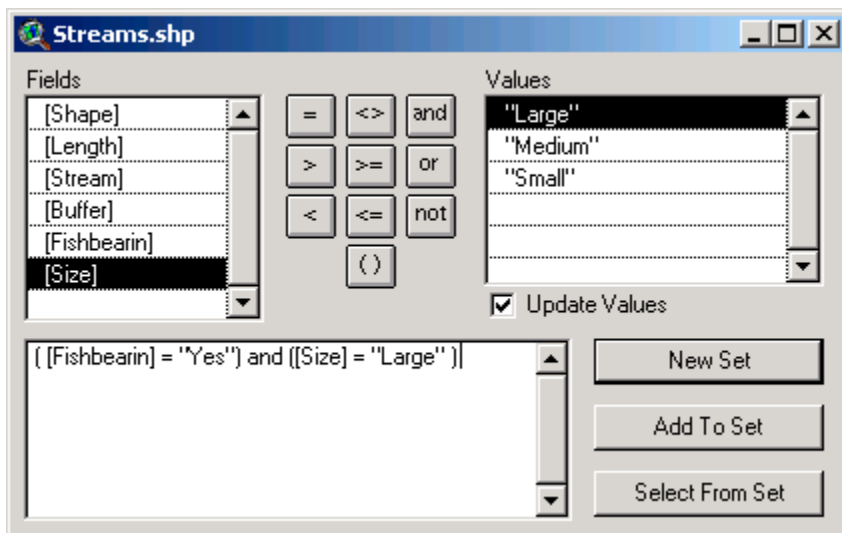
5.2. Information for a new supervisor of Brown Tract. A new supervisor (Kelly Campbell) was hired for the Brown Tract, and wants to get familiar with the forest resources located there. She asks you to provide some information about the forest and its resources:

1. In ArcView, open the Streams.shp GIS database into a View window.
2. Make the Streams.shp GIS database the active database in the View window Table of Contents.
3. Press the Query Builder  button to build a query for questions a-q.


From the streams GIS database:


a) How many *miles* of fish-bearing, large streams are in the database?

When the Query Builder dialog box is present, double-click (⌘⌘) "Fishbearin" in the "Fields" list box, then double-click the "=" button, then double-click "Yes" in the "Values" list box. Double-click the "and" button, given that this is a multiple criteria query. Now, double-click "Size" in the "Fields" list box, then double-click the "=" button, then double-click "Medium" in the "Values" list box. The query created should resemble the image below.



The query is presented as ([Fishbearin] = "Yes") and ([Size] = "Large") within ArcView.

Press the "New Set" button  to show the polygons selected in the View window.

Press the Open Theme Table  button to view the Attribute Table for Streams.shp.

The polygon records that match the query should be highlighted in yellow (you may need to move down in the file a bit before you see the selected records).

Shape	Length	Stream	Buffer	Fishbearin	Size
PolyLine	361.73314	1	20	No	Small
PolyLine	175.80663	2	20	No	Small
PolyLine	991.93721	3	20	No	Small
PolyLine	384.16082	4	20	No	Small
PolyLine	164.17116	5	20	No	Small
PolyLine	2114.90159	6	20	No	Small
PolyLine	487.86125	7	20	No	Small
PolyLine	1186.30501	8	20	No	Small
PolyLine	844.87776	9	20	No	Small
PolyLine	1281.32430	10	20	No	Small
PolyLine	190.92902	11	20	No	Small
PolyLine	1296.58147	12	20	No	Small
PolyLine	174.49712	13	50	Yes	Small
PolyLine	357.91295	14	20	No	Small
PolyLine	453.10738	15	50	Yes	Small
PolyLine	361.55231	16	50	Yes	Small
PolyLine	717.57259	17	20	No	Small
PolyLine	728.20806	18	20	No	Small
PolyLine	576.78022	19	20	No	Small

Press the "Length" column header button down.
 Select from the Main Menu System, "Field," then "Statistics." The statistics related to the query should resemble the following:

Sum: 4738.55471
Count: 2
Mean: 2369.27736
Maximum: 4259.94578
Minimum: 478.60893
Range: 3781.33685
Variance: 7149254.18658
Standard Deviation: 2673.80893

From this report window, one can ascertain that 2 streams were located matching the query, amounting to 4738.55 feet (0.90 miles) of stream.
 The following queries utilize the same procedures as noted above.

b) How many *miles* of fish-bearing, medium streams are in the database?

- Query: ([Fishbearin] = "Yes") and ([Size] = "Medium")
Result: 3.14 miles
- c) How many *miles* of fish-bearing, small streams are in the database?
Query: ([Fishbearin] = "Yes") and ([Size] = "Small")
Result: 4.86 miles
- d) How many *miles* of non-fish bearing, large streams are in the database?
Query: ([Fishbearin] = "No") and ([Size] = "Large")
Result: 0 miles
- e) How many *miles* of non-fish bearing, medium streams are in the database?
Query: ([Fishbearin] = "No") and ([Size] = "Medium")
Result: 0 miles
- f) How many *miles* of non-fish bearing, small streams are in the database?
Query: ([Fishbearin] = "No") and ([Size] = "Small")
Result: 25.74 miles

From the roads GIS database:

- g) How many *miles* of road on (or near) the Brown Tract are rock roads?
Query: ([Surface] = "Rock")
Result: 41.25 miles
- h) How many *miles* of road on (or near) the Brown Tract are dirt roads?
Query: ([Surface] = "Dirt")
Result: 2.25 miles

From the soils GIS database:

- i) How many acres of "PR" soil type are there on the Brown Tract?
Query: ([Soiltype] = "PR")
Result: 1704.2 acres
- j) How many acres of "DN" soil type are there on the Brown Tract?
Query: ([Soiltype] = "DN")
Result: 1389.5 acres
- k) How many acres of "WL" soil type are there on the Brown Tract?
Query: ([Soiltype] = "WL")
Result: 435.1 acres

From the watersources GIS database:

- l) How many beaver pond water sources are on the Brown Tract?
Query: ([Water_type] = "Beaver Pond")
Result: 1
- m) How many culvert spill sources are on (or near) the Brown Tract?
Query: ([Water_type] = "Culvert Spill")
Result: 5 (3 are on, 2 are near)
- n) How many water tank sources are on (or near) the Brown Tract?
Query: ([Water_type] = "Water Tower")
Result: 1 (it is near, not on, the tract)

From the trails GIS database:

o) How many *miles* of authorized trails are there on (or near) the Brown Tract?

Query: ([Condition] = "Authorized")

Result: 5.86 miles

p) How many *miles* of unauthorized trails are there on (or near) the Brown Tract?

Query: ([Condition] = "Unauthorized")

Result: 4.43 miles

q) How many *miles* of proposed trails are there on (or near) the Brown Tract?

Query: ([Condition] = "Proposed")

Result: 3.71 miles