

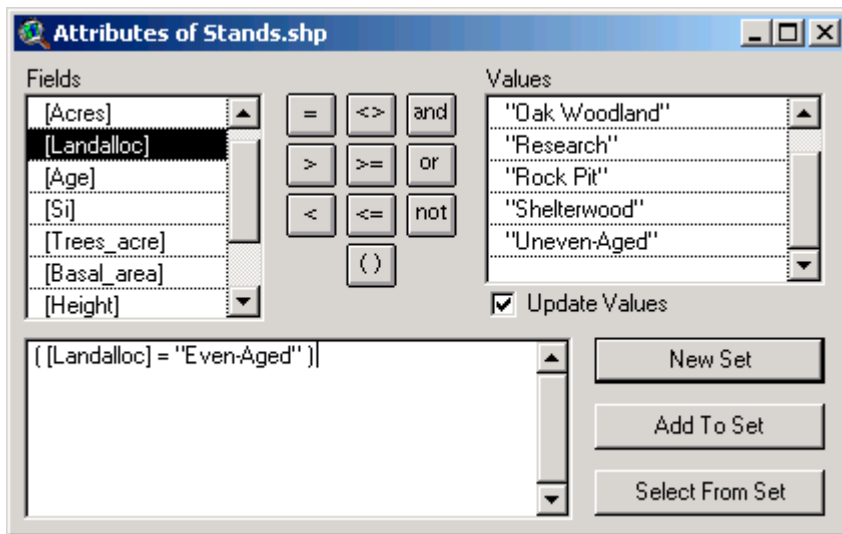
5.3. Brown Tract Annual Report. In addition to the requests by Kelly Campbell to get her acquainted with some of the resources located within and around the forest, she asks you to supply the following information for the Annual Report:

1. In ArcView, open the Stands.shp GIS database into a View window.
2. Make the Stands.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-e*.

a) How many acres of even-aged stands are there on the forest?

When the Query Builder dialog box is present, double-click (⌘) "Landalloc" in the "Fields" list box, then double-click the "=" button, then double-click "Even-Aged" in the "Values" list box. The query created should resemble the image below.



The query is presented as ([Landalloc] = "Even-Aged") 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 Stands.shp. The polygon records that match the query should be highlighted in yellow.

Shape	Acres	Landalbic	Age	Si	Trees_acre	Basal_area	Height	Board_feet	Cubic_feet
Polygon	7.85	Even-Aged	52	98	196	150	86	12703	4326
Polygon	53.82	Even-Aged	46	124	416	143	96	13282	4333
Polygon	18.66	Even-Aged	51	107	546	187	84	16577	5064
Polygon	70.86	Even-Aged	51	119	480	176	102	21149	5808
Polygon	12.84	Even-Aged	46	119	627	178	81	7260	5588
Polygon	29.77	Even-Aged	121	108	412	182	99	14834	5845
Polygon	8.28	Even-Aged	40	96	504	133	69	2758	3647
Polygon	61.50	Uneven-Aged	48	123	460	160	100	15917	5201
Polygon	7.66	Uneven-Aged	42	99	165	80	85	4500	2856
Polygon	58.39	Uneven-Aged	39	111	476	132	93	10757	4072
Polygon	26.90	Uneven-Aged	54	98	334	103	83	7250	2690
Polygon	16.09	Even-Aged	51	109	606	140	88	8488	3790
Polygon	36.90	Even-Aged	49	112	647	200	93	20029	6197
Polygon	3.85	Even-Aged	50	122	653	211	106	27136	7822
Polygon	7.59	Even-Aged	32	111	398	85	89	1520	2446
Polygon	4.65	Even-Aged	48	130	262	97	98	9402	3086
Polygon	8.16	Even-Aged	52	99	339	133	77	7719	3416
Polygon	27.94	Uneven-Aged	46	108	388	135	82	5510	3844
Polygon	8.63	Uneven-Aged	53	110	578	97	71	3300	2234

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

Sum: 3738.12
Count: 204
Mean: 18.32
Maximum: 148.74
Minimum: 0.54
Range: 148.20
Variance: 357.21
Standard Deviation: 18.90

From this report window, one can ascertain that 204 stands were located matching the query, amounting to 3738.1 acres.

The following queries utilize the same procedures as noted above.

b) How many acres of uneven-aged stands are there on the forest?

- Query: ([Landalloc] = "Uneven-Aged")
Result: 890.8 acres
- c) How many acres are put into a Research category?
Query: ([Landalloc] = "Research")
Result: 308.6 acres
- d) How many acres have board foot volume \geq 30,000 per acre?
Query: ([Board_feet] \geq 30000)
Result: 1401.3 acres
- e) How many acres have trees per acre \geq 400 per acre?
Query: ([Trees_acre] \geq 400)
Result: 1878.0 acres