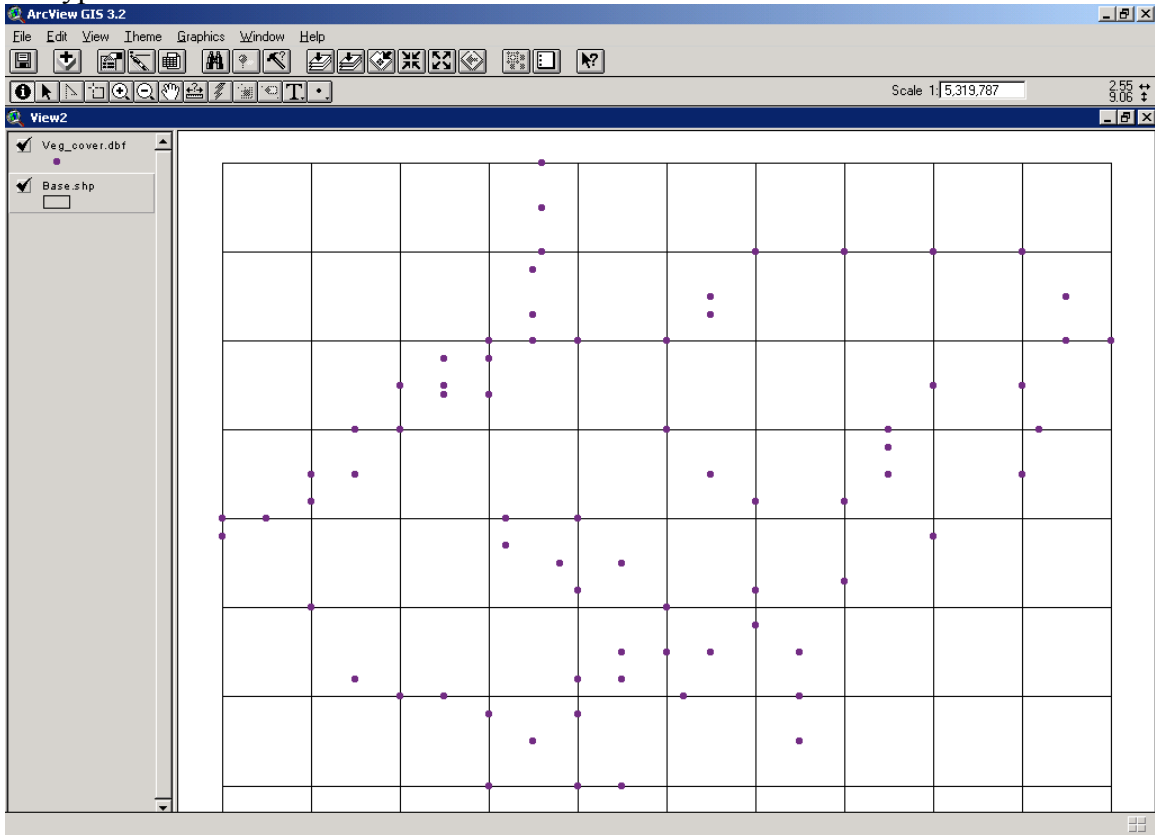
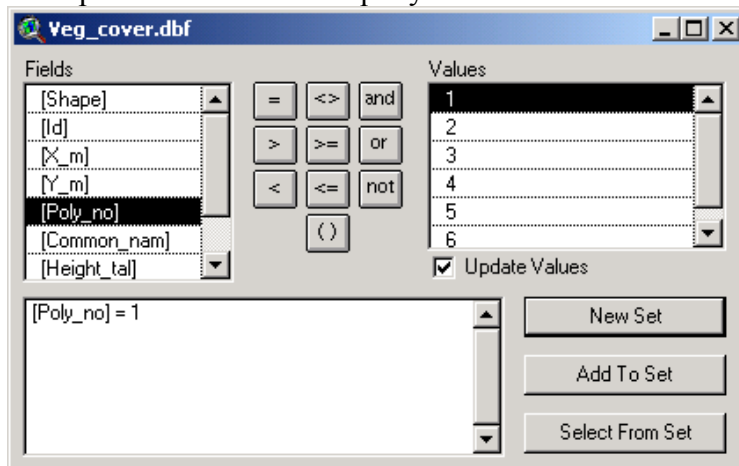


STUDY SITE PROJECT PROCESSING THE VEGETATION AND GROUND COVER

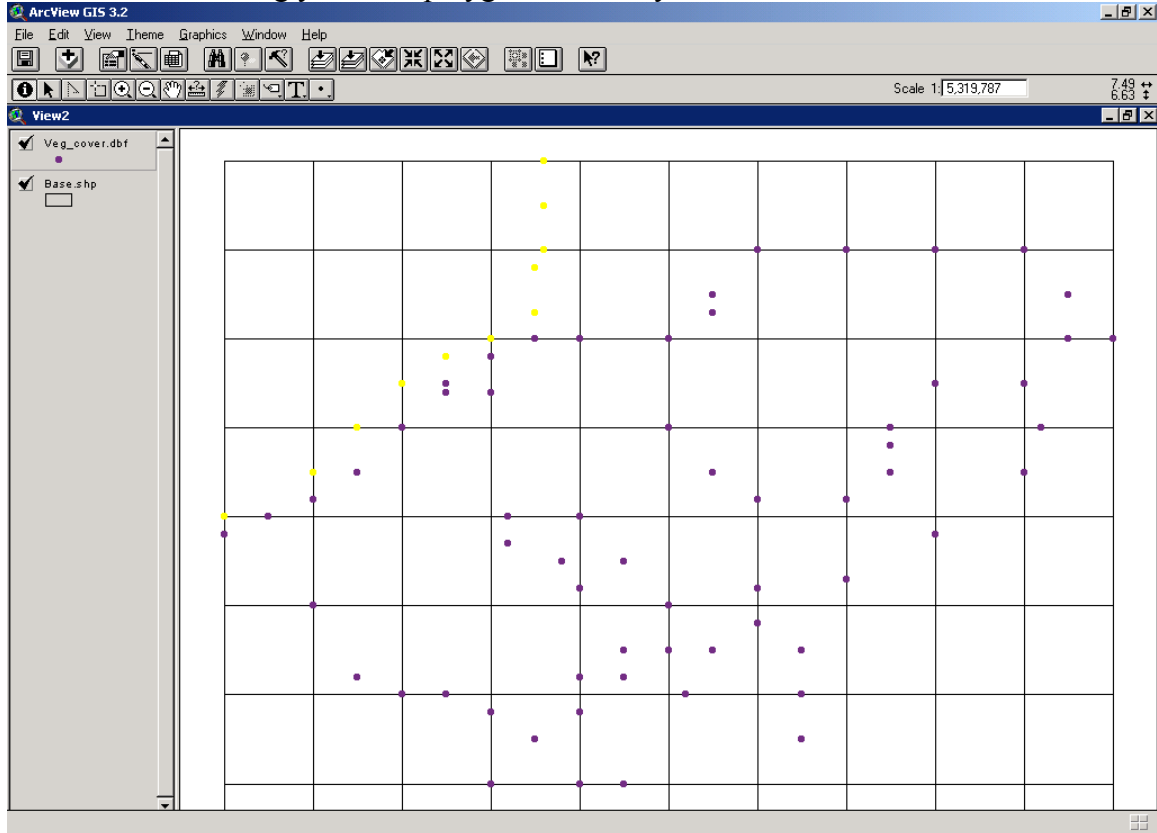
1. Follow the “Bringing in data from EXCEL to your GIS project” instructions to bring in the points that you collected in the study site to outline your ground cover types.



2. Make the vegetation cover theme active. Select the query button (the hammer) on the top row of buttons and query for all of the dots found in polygon No. 1.



3. The dots outlining your first polygon will turn yellow in color.

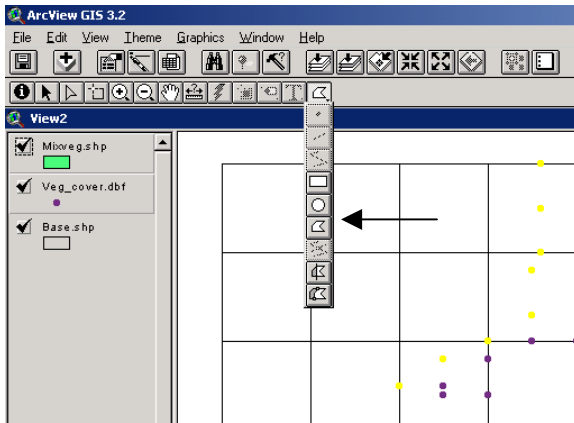


4. From the view menu, choose NEW THEME. The NEW THEME dialog box displays.
5. Click on the Feature type drop down arrow and select “Polygon”, then click OK.



Another dialog box appears asking you the name of the theme. Name the theme according to the type of vegetation cover it represents and be sure to save it to your project folder. In this case the new theme is called mixveg.

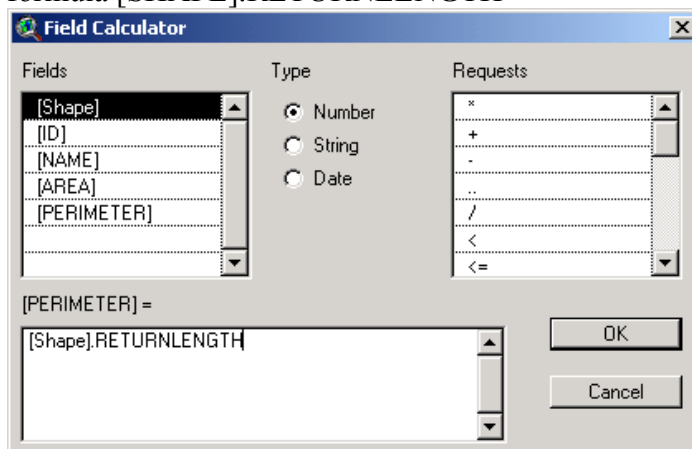
6. Specify the drive where you want it to go. If you have not SET YOUR WORKING DIRECTORY, then go to file and select SET WORKING DIRECTORY. In this case the a:\
7. A new theme called mixveg.shp has been added to the view. At this moment it has no shape.
8. Notice that the checked box has a dashed line around it, indicating the theme is being edited.
9. Now you will draw your polygon so choose the polygon tool from the DRAW tool drop down list.



10. Draw the boundary of the polygon carefully by connecting the dots. Single click to start each side of the polygon and double-click to finish the polygon. You can use the VERTEX EDIT button to “fine tune” your curves.
11. If you wish to resize or move your polygon, then use the POINTER button tool.
12. Open the attribute table for your new polygon. Notice that there is nothing in it!
13. Under the EDIT menu select ADD FIELDS and add the fields listed below. The Field Definition dialog box appears. Name the field and select the type and width of each field. Click OK.

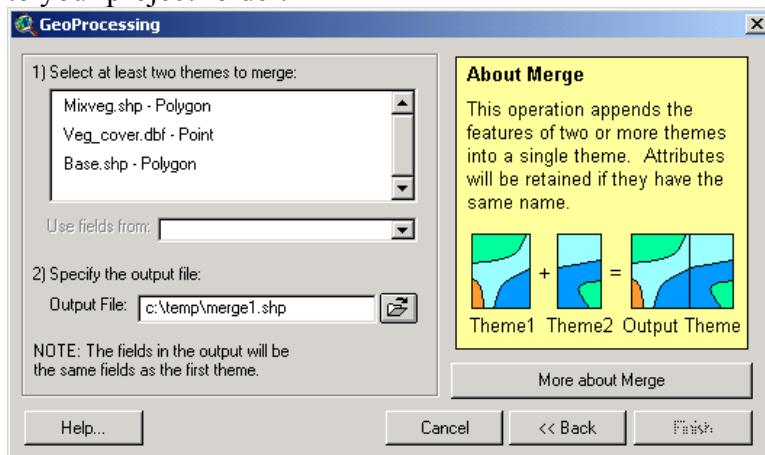
	TYPE	WIDTH
NAME	(a string field with 16 spaces)	
PERIMETER	(a number field with 10 spaces and 3 decimal places)	
AREA	(a number field with 10 spaces and 3 decimal places)	

14. Click on the EDIT tool. Enter the data in each field that you created. BE SURE to hit ENTER after each entry! Also enter the POLYGON number that you assigned this polygon from your EXCEL data sheet.
15. In order to calculate the perimeter of the polygon, select the perimeter field by moving the pointer over that field. It will become gray. Select the calculator button from the menu bar. Double click on [SHAPE] under fields and enter the formula [SHAPE].RETURNLENGTH



16. Click OK and the perimeter will be calculated for that polygon. Repeat this procedure by selecting the AREA field. Then select the calculator again and in the menu that appears enter the formula [SHAPE].RETURNAREA

17. When you are finished with the table save your edits by selecting TABLES from the menu bar and the stop editing dialog box appears. Choose YES to save your edits and close the theme table.
18. Repeat this procedure for each numbered polygon in your study site. If you have 6 numbers of polygons, you will have 6 new themes.
19. Choose Extensions from the file menu and the EXTENSIONS dialog box opens. Check Geoprocessing. When the Geoprocessing extension is loaded, the menu choice called GEOPROCESSING WIZARD will appear as the last choice in the VIEW dropdown window. Choose GEOPROCESSING from the VIEW menu.
20. You will select two polygons at a time to MERGE together. CHOOSE them in order. For example MERGE polygon one and two to form cover1. Then merge cover1 with polygon 3, etc. Continue until all of your polygons are merged into one theme called groundcover or cover. Be sure to designate your OUTPUT file to your project folder.



21. Double click on your cover layer and in the Legend Editor classify each layer using unique value. When you are finished your cover layer may look something like this:

