

ArcView Application 7: Using Digitized Soils Data in ArcView (1-2003)

Joining Tables.

1. Start ArcView and open a new view, and add the county boundaries theme.
2. Add a soils theme to the view. (Choose the soils from any county.)
3. Size the View window so that it only uses about one fourth of the monitor space.
4. Make the soils theme active, and click on the Open Theme Table button to open the Attributes of Soils table.
5. Use the ArcView Window pulldown menu to select the Project window (Untitled.apr) and make it active.
6. In the Project window click on the Tables icon. Then click on the Add button to add the Comp table. The Comp table will be located in the Info subdirectory of the appropriate Soils Data directory. (Note: Make sure the file type in the “List of File Types” in the Add Table window is set to “Info”)
7. Join Comp table to the Attributes of Soils table by following these steps:
 - a. Make the Comp table active.
 - b. Click on the column title “Musym.”
 - c. Make the Attributes of Soils table active.
 - d. Click on the column title “Musym.”
 - e. In the Table pulldown menu choose Join.

Querying Tables.

8. Make the view window active.
9. Make the Soils theme active.
10. Click on the Query Builder button. This will display a query builder window for the soils theme.
11. In the Query Builder window write the following logical expression:
[Slopeh]>=15
12. In the Query Builder, click the New Set button. This will select all of the soils with a high slope range greater than 15%.

Converting theme selections to new themes.

13. In the view window make the Soils theme active.
14. Use the Theme pulldown menu to select Convert to Shapefile. This will display a Convert Soils window.
15. Select an appropriate directory for the new theme and name it Soils+15 Slope. Click OK. The Soils+15 Slope is stored in the selected directory and is available for use in the project view.
16. Similarly, prepare themes with the following: Compname = Svea, Surfex = CL, Drainage = P (Note: When finished practicing querying data from the Soils table use the Table pulldown menu to remove all joins.)

Linking Tables and Querying Data

17. In the Project window click on the Tables icon. Then click on the Add button to add the Layer table. (Note: (Note: Make sure the file type in the “List of File Types” in the Add Table window is set to “Info”)
18. Link the Attributes table to the Comp table to the Layer table following these steps:
 - a. Make the Attributes of Soils table active.
 - b. Click on the column title “Musym.”
 - c. Make the Comp table active.
 - d. Click on the column title “Musym.”
 - e. With the Comp table still active, click on the column title “Muid.”
 - f. Make the Layer table active.
 - g. Click on the column title “Muid.”
19. With the Layer table still active, click on the Query Builder button. This will display a query builder window for the Layer table.
20. In the Query Builder window write the following logical expression:
(([Seqnum]=1)and([Laynum]=1))and([Phl]>=7.4)
21. In the Query Builder, click the New Set button. This will select the areas where the low range of the pH is greater than 7.3 in the top layer of the dominant soil in each mapunit.
22. Try other logical expressions such as: ([Seqnum]=1)and([Layernum]=1)and([Salinl]>=4)
23. Again, these selections can be converted into separate GIS layers.

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