

Helpful Hint— How to Determine the Acres of Soil Data Viewer Interpretations by Field

Applies to Version:	Toolkit 5.3, SP-3
Written by:	June Johnson Washington NRCS Toolkit Coordinator
Helpful Hint Date:	4/24/2007

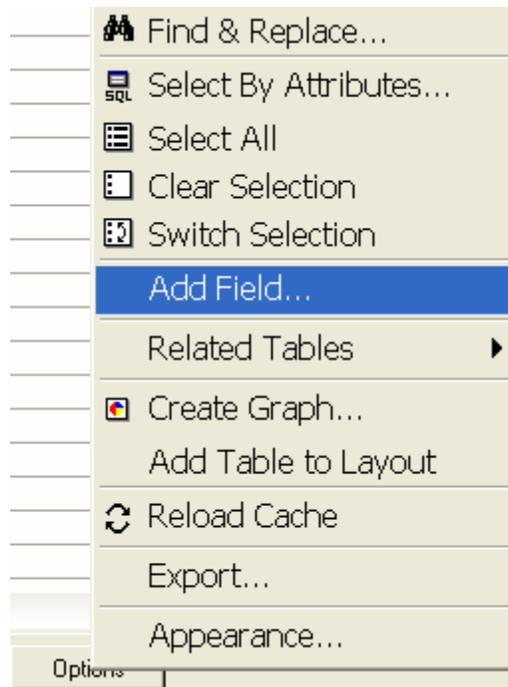
Background: The Soils Interpretation layers that are created by the Soil Data Viewer do not split the interpretations by field, nor do they give the user the acres of each interpretation. This hint outlines a method to accomplish this.

Procedure:

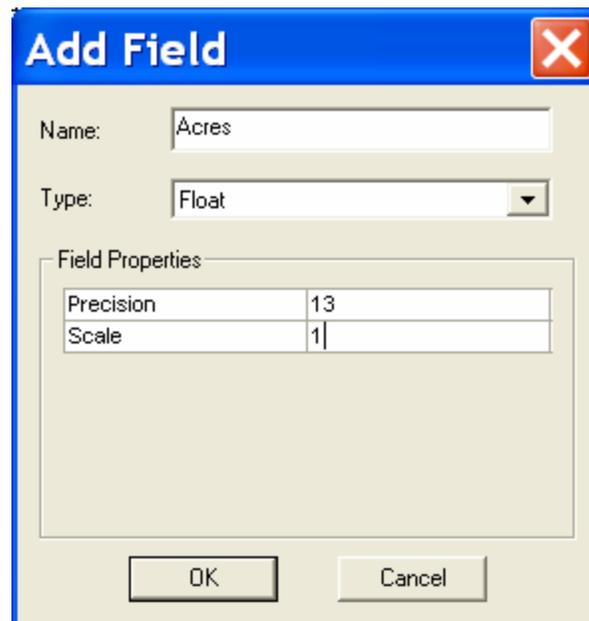
1. Export the temporary Soil Data Viewer layer as shown in the Helpful Hint - Save Soil Data Viewer Maps (4/24/2007) and add to the map as a layer.
2. If you select one of the Ecological Sites, or other interpretation, you will notice that they were not split out by field. If this is important to you, do the following:
 - a. Go to Tools→Geoprocessing Wizard
 - b. Select Intersect two layers→Next
 - c. For input select the SDV layer
 - d. For polygon overlay layer select the Planned Land Unit.
 - e. For the output, click on the browse button and make sure that the shapefile will be saved in the correct customer's Resource Maps folder and name the file something more meaningful than Intersection_Output.shp. Click Save.
 - f. Push Finish.
3. Set the symbology for this new layer as described in steps 15 and 16 of the Helpful Hint - Save Soil Data Viewer Maps (4/24/2007).
4. Right mouse click on the new layer created by running the Intersect and open the attribute table.
5. At the bottom of the Attribute Table, click on the Options button.

FID	Shape*	Id	BufferDist	AREA	PERIMETER
0	Polygon	0	0.304800	1743942.746	22186.344
1	Polygon	0	0.304800	572347.668	8266.384
2	Polygon	0	0.304800	66719.088	1376.81
3	Polygon	0	0.304800	572347.668	8266.384
4	Polygon	0	0.304800	26212.069	855.542
5	Polygon	0	0.304800	79807.862	1909.809
6	Polygon	0	0.304800	1743942.746	22186.344
7	Polygon	0	0.304800	1743942.746	22186.344
8	Polygon	0	0.304800	262580.499	2535.91
9	Polygon	0	0.304800	262580.499	2535.91

6. Select Add Field



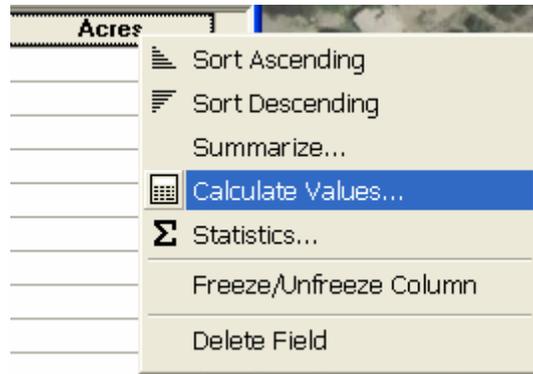
7. In the Name cell, type in Acres, for the Type, select Float; type a number for Precision and Scale; click OK



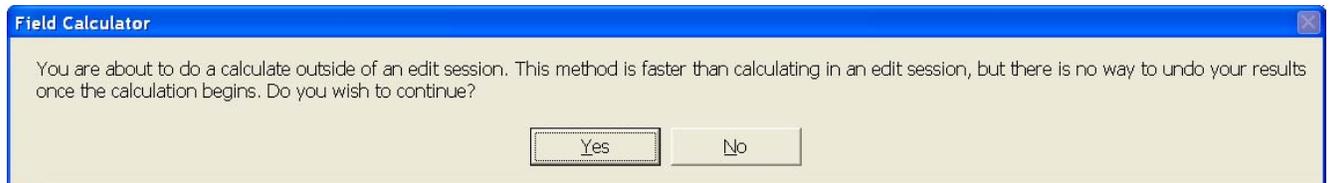
Precision is the number of digits the field will hold (max 13 for Float with decimal)

Scale is the number of digits after the decimal.

8. Scroll all of the way to the right to locate the Acres column, right mouse click the column header and select Calculate Values



9. A warning will appear which says that you will not be able to undo your actions if an error occurs. Answer Yes and continue.

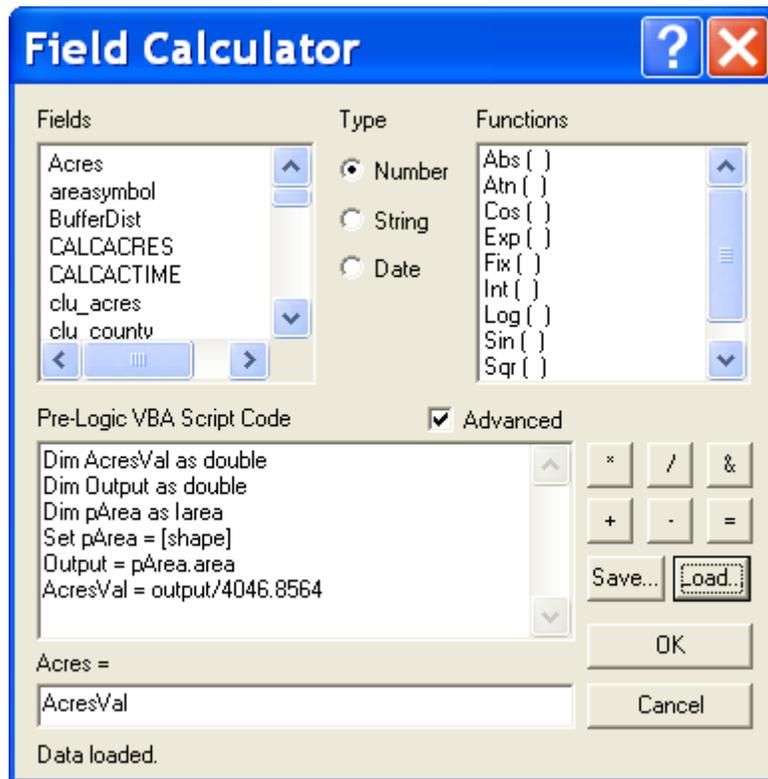


10. The Field Calculator dialogue opens, check the box for Advanced.
11. Type the following in the upper box :

```
Dim AcresVal as double  
Dim Output as double  
Dim pArea as Iarea  
Set pArea = [shape]  
Output = pArea.area  
AcresVal=output/4046.8564
```

In the lower box, type in: AcresVal

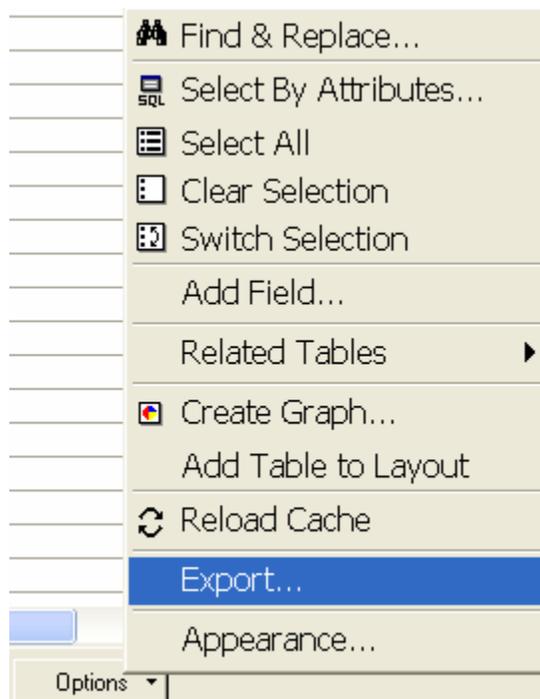
For future reference, click on Save and save the expression to a location that you will remember.



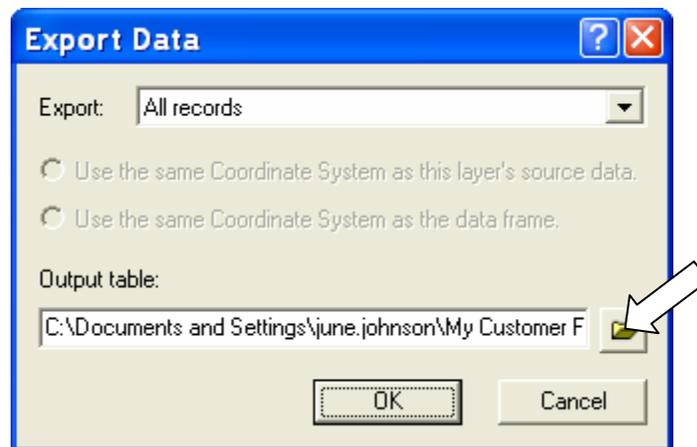
Click Ok and the Acres column will be populated.

Acres
0.2
0
0.7
0.1
0.1
0.3
5.3
1.8
0
1.2

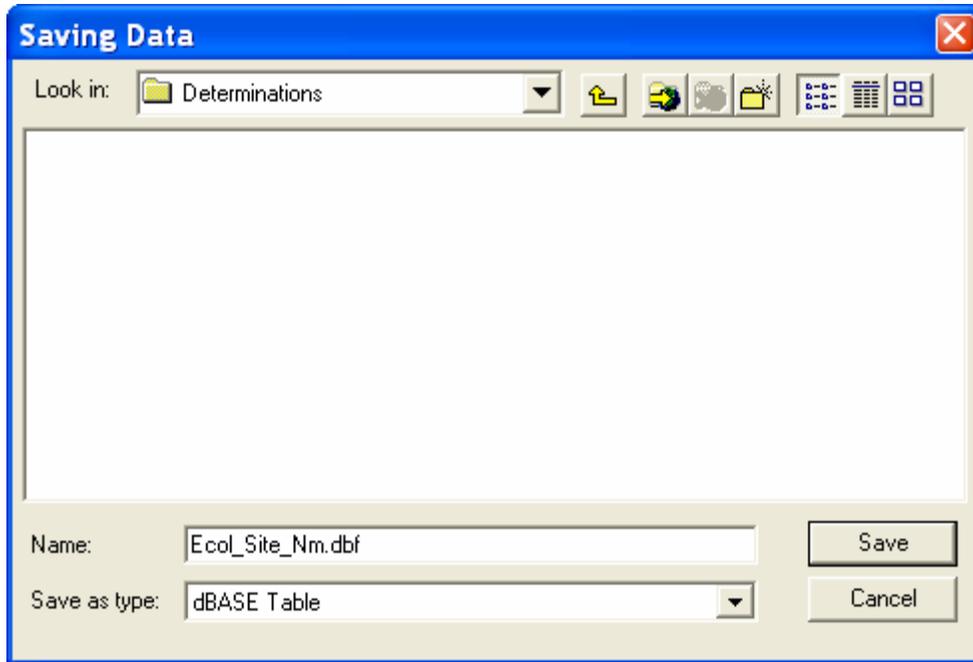
12. Click on the Options button in the attribute table, again, and select Export



13. On the Export Data window, click on the browse button and navigate to a location where you want to save the table, e.g. the Determinations folder. Make sure that you are using the correct customer.



14. Name the file something other than Export_Output.dbf; click Save and OK.



15. When prompted answer No to this question.



16. At this point, close the attribute table, save your Arc Map project and close it. You may close your Toolkit Customer and Toolkit, too, if desired.

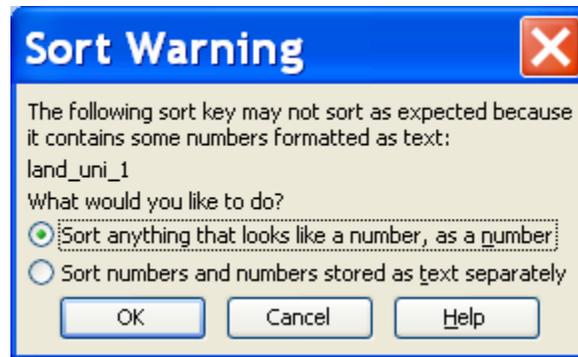
17. In Windows Explorer, browse to C:\Documents and Settings\\My Customer Files Toolkit\\Determinations; double click on the database file you just exported. Use Microsoft Office Excel as the program to open it.

18. Select the worksheet and go Format→Column→AutoFit Selection. This will make the spreadsheet easier to read.

19. If desired, delete any unnecessary columns. The main ones will be MUSYM, MUNAME, <name of interpretation> (in this example, EcoSiteNm), tract_num, land_uni_1, and Acres.

20. Select the table, use Data→Sort to sort by <name of interpretation>, e.g. EcoSiteNm, then by land_uni_1.

21. Click OK to the Sort Warning



22. Go to File→Save As and Save your table as an Excel spreadsheet (.xls)

23. Use the mathematical functions of Excel to calculate the acres of each <name of interpretation> for the tract(s) and each field.

24. The next page shows an example of what your spreadsheet will resemble.

Ecological Site Acres by Field

musym	muname	EcoSiteNm	tract_num	land_uni_1	Acres
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	14.1
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	1.8
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	1.8
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.7
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.3
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.3
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.1
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.1
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.1
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.1
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	1	0.1
					19.5
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	20.3
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	5.3
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	5.3
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	4.9
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	3.4
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	2.3
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	2	1.1
ChB	Cheney stony silt loam, 0 to 20 percent slopes	LOAMY 15+ PZ	841	2	0.2
					42.8
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	3	17.6
CgB	Cheney gravelly silt loam, 0 to 8 percent slopes	LOAMY 15+ PZ	841	3	0.1
					17.7
CoB	Cheney-Uhlig complex, 0 to 8 percent slopes	LOAMY 15+ PZ	841	4	1.4
CnB	Cheney and uhlig silt loams, 0 to 8 percent slopes	LOAMY 15+ PZ	841	4	0.3
					1.7
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	1	3.7
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	1	1.7
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	1	0.7
					6.1
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	2	8.4
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	2	1.2
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	2	0.3
Ca	Caldwell silt loam	LOAMY BOTTOM 15+ PZ	841	2	0.2
					10.1
Cy	Cocolalla silty clay loam, drained	WET MEADOW 15+ PZ	841	3	1.1