

Image Analysis for ArcGIS FAQs



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Remote Sensing Applications Center
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How Do I Add Area to a Polygon Shapefile Attribute Table?

This is one of those utilities that was simple in ArcView, is cumbersome in ArcGIS 8.3 but, hopefully, should reappear in ArcGIS 9+.

What You Will Need and Other Assumptions

- A polygon shapefile open in ArcMap

Overview of Steps

1. Open the shapefile attribute table and add an Area Field.
2. Locate, Copy and Paste the Area VBA code into the Field Calculator.
3. Evaluate Results

Step-by-Step:

I. Open the Shapefile Attribute Table and Add an Area Field

1. Right-click on the shapefile name in the Table of Contents.
2. Select **Open Attribute Table** from the right-click menu.
3. Start an edit session, click **Editor | Start Editing**. (Note: this is an optional but recommended step. Calculating a field is faster outside of an edit session, but you won't be able to undo the calculation).
4. From the attribute table, click the **Options** button and select **Add Field**. This will open the Add Field dialog.
5. Enter **Area** for the **Field Name**.
6. Select **Double** for the Area **Type**.
7. Click **OK** to close the New Field dialog.

II. Locate, Copy and Paste the Area VBA code into the Field Calculator

1. Type the F1 key to open the ArcGIS Desktop Help.
2. Click the **Index** tab and type: "**fields in tables**" and select "**calculating values**".
3. Click the **Display** button to display the topic—however, you may get another dialog box showing more than one topic found—choose **Making Field Calculations** and click the **Display** button again.
4. Click the expand arrow next to **update area for shapefile**.

5. Click-and-drag to highlight the VBA code in step 6 of the instructions.
6. Copy the selected VBA code using Ctrl-C (hold down the Ctrl key on the keyboard and press the “c” key).
7. Return to the attribute table for the new shapefile and **right-click** the **Area** column heading.
8. Select **Calculate Values** to open the **Field Calculator**.
9. Click the **Advanced** checkbox in the **Field Calculator**.
10. Click in the **Pre-Logic VBA Script Code** field and paste the VBA code using Ctrl-V (hold down the Ctrl key and press the “v” key).
11. Type **dblArea** in the **Area = field** (located just below the **Pre-Logic VBA Script Code** field)
12. Click **OK**.

III. Evaluate the Results

1. The **Area** field will be populated with the area value for each polygon. The values are in units defined in the **Data Frame** properties. Ensure that the values make sense.
2. At this point, you can format the area values or calculate new units (e.g. acres) as you wish.
3. Save your edits and stop the edit session.