

Creating a New Layer by Digitizing Theme/Layer in ArcGIS 9.x

Creating a new layer through digitizing allows the user to create a new shapefile for a desired theme for which there is currently no data available. For example, you may wish to show the major areas of agricultural land in Canada. Digitizing allows you to create a theme layer of agricultural land to overlay onto a base map of Canada. In this example, you would already have created a map of Canada.

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- 1. Open ArcCatalog. (yellow filing cabinet on toolbar)
- 2. The ArcCatalog dialogue displays. Check the **Location** indicator to select a drive and folder that you have access to for saving and retrieving data
- In the ArcCatalog dialogue, go File → New → Shapefile and the Create New Shapefile dialog displays.
- 4. In the **Create New Shapefile** dialog, type in an appropriate **Name** (Agricultural Land) and select the **Feature Type** (polygon). Click **OK** and your new shapefile will appear in the ArcCatalog contents tab.





- 5. **Optional:** If you wish to add a new **Field** (or Fields) in the **Attribute Table** of your new layer, this is the time to create it while you are still in ArcCatalog. For example, you may wish to create a Field to enter the number of Hectares. Double click on the new shapefile (Agricultural Land) in the ArcCatalog contents tab and enter an appropriate name (Hectares) under **Field Name** and in the **Data Type** field, enter the appropriate data type (integer, in this case).
- 6. Close ArcCatalog and return to your Data View in ArcMap
- 7. Using the **Add Data** button solution add your newly created shapefile (e.g. Agricultural Land) from the location where you saved it to the Data View (map Table of Contents).
- Now go Editor (on toolbar) → Start Editing → and navigate through the menu to choose the shapefile that you want to edit (in this case, Agricultural Land).

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9. Use the **Sketch Tool** (pencil on toolbar) to draw your new layer. As you are drawing, click once to change direction and click twice to close the polygon.

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- 10. Once you have completed the polygon, go Editor \rightarrow Stop Editing \rightarrow Save Edits. You may also save edits as you go Editor \rightarrow Save Edits.
- 11. The new layer (Agricultural Land) now becomes part of your map project.
- 12. You can change the symbol colour for Agricultural Land if you wish. In the **Table of Contents**, double click on the symbol you want to change, and the **Symbol Selector** dialog displays allowing you to make the desired changes.

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