


Setting up GPS photo hyperlinks in ArcGIS

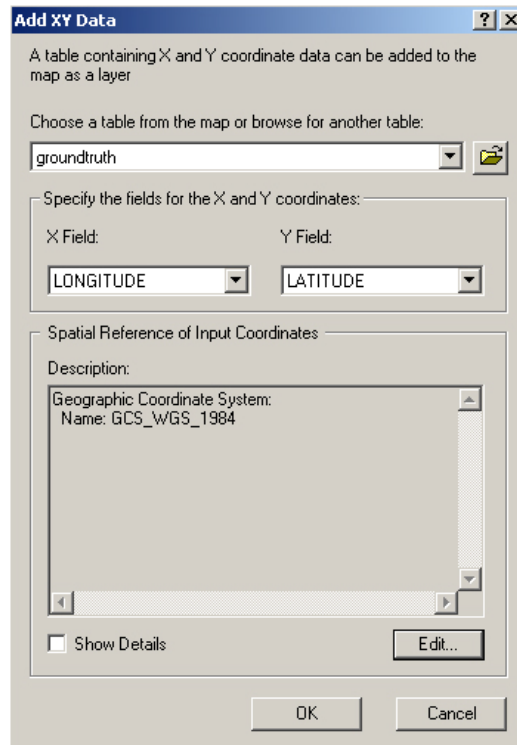
1. In order to create a point shapefile with GPS photo hyperlinks, create a table with MS excel. As seen below, the necessary fields include: ID, Name of site, X coordinate, Y coordinate, Bearing, and Photo file location. Notice that you will have to enter the same coordinates multiple times if several photos were taken in one location.

	A	B	C	D	E	F
	ID	Name	Latitude	Longitude	Bearing	Photo
2	1	Pond center	31.9196800000	-109.1611300000	330	C:\ClassFiles\Groundtruth\cannon_001.JPG
3	2	End of slope	31.8743000000	-109.1825100000	330	C:\ClassFiles\Groundtruth\cannon_002.JPG
4	2	End of slope	31.8743000000	-109.1825100000	314	C:\ClassFiles\Groundtruth\cannon_003.JPG
5	3	Midslope	31.8442600000	-109.1327500000	109	C:\ClassFiles\Groundtruth\P1010085.JPG
6	4	Overlook	31.9011200000	-109.2400200000	109	C:\ClassFiles\Groundtruth\P1010086.JPG
7	5	Overlook	31.9011200000	-109.2400200000	109	C:\ClassFiles\Groundtruth\P1010087.JPG
8	6	Overlook	31.9011200000	-109.2400200000	313	C:\ClassFiles\Groundtruth\P1010046.JPG
9	7	Intersection	31.9105000000	-109.2508400000	167	C:\ClassFiles\Groundtruth\P1010061.JPG
10	8	3	31.5244100000	-109.1097100000	240	C:\ClassFiles\Groundtruth\P1010062.JPG
11	9	Pond road	31.9205830000	-109.1607000000	288	C:\ClassFiles\Groundtruth\P1010063.JPG
12	10	Pond road	31.9205830000	-109.1607000000	335	C:\ClassFiles\Groundtruth\P1010074.JPG
13	11	Pond road	31.9205830000	-109.1607000000	150	C:\ClassFiles\Groundtruth\P1010075.JPG
14	12	Paradise Road	31.9089500000	-109.2478100000	55	C:\ClassFiles\Groundtruth\P1010076.JPG
15	13	Paradise Road	31.9089500000	-109.2478100000	260	C:\ClassFiles\Groundtruth\P1010077.JPG
16	14	Paradise Road	31.9089500000	-109.2478100000	102	C:\ClassFiles\Groundtruth\P1010080.JPG

2. Once the spreadsheet is complete, save the file as a dbf file to import into ArcGIS. Other text files may also be used as well, dbf is the native format of the table in a shapefile.

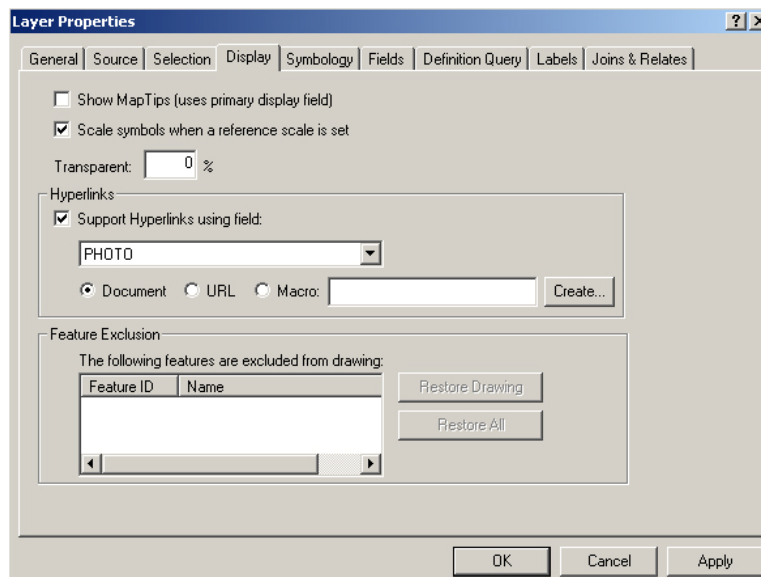
3. Load the new table in ArcMap using the add data button . In the *layers* list to the left, right-click the file name, and choose Open to view the table. Inspect it to make sure there were no errors importing the data.


4. If the table was successfully imported, choose *Tools > Add XY data* to create a point shapefile from the table. As seen in the screen-shot on the next page, choose the x and y fields, and click the *Edit* button to designate a projection. Click *OK* to create the shapefile.



5. Once the file has been created, load it with a base map and inspect for any obvious errors such as points falling completely off the map. Most of the time, these types of errors are due to data entry typos. Make sure that the base map is in the same projection as the shapefile.

6. To activate the hyperlinks feature in ArcMap, right-click the new shapefile, and select *Properties*. In the *Layer Properties* dialog, choose the *Display* tab and check *Support Hyperlinks using field*. In the drop down menu, choose the field that contains the directory and filename of the photo. Click *OK* when finished.



7. Click the hyperlinks button  to activate this feature. The points will turn blue, click any point with the lightning bolt cursor to view the photo. If more than one photo is available for the point, a list will appear to choose from. Open the table also to view the other attributes such as bearing while viewing the photo.

