# **IOWA STATE UNIVERSITY**

## Extension and Outreach



ArcGIS 10.1, 10.2

# **GeoTagged Photos To Points**

Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University GIS Geospatial Technology Training Program short course series, "Essential ArcGIS Tutorial Series." The task sheets are designed to provide quick, easy instructions for performing specific tasks in GIS.

The GeoTagged Photos To Points tool is available in ArcGIS Desktop Standard license. The tool located in the Data Management toolbox, allows you to visualize the locations of images taken with a GPS-enabled camera or mobile device (such as an iPhone). The tool creates points from the x-, y-, and z-coordinate information stored in Exif (Exchangeable image file format) metadata within the photo.

#### 1. Create a folder containing geotagged photos

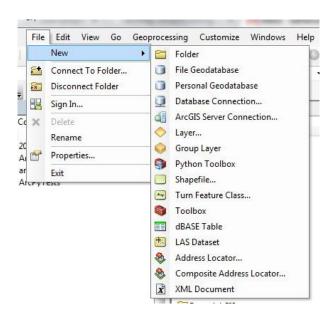
- a. Browse to an appropriate location, File > New > Folder.
- b. Copy and paste the photos into this folder.

#### 2. Create an output file geodatabase

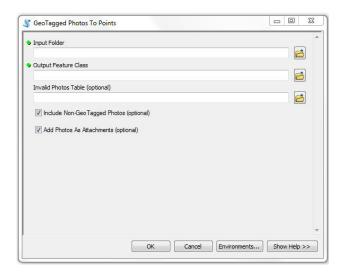
- a. Open ArcCatalog, click Start > All Programs > ArcGlS > ArcCatalog10.1.
- b. Browse to the appropriate location, click **File** > **New** > **File Geodatabase**.

### 3. Use the GeoTagged Photos To Points tool

- a. Open ArcMap, click Start > All Programs > ArcGlS > ArcMap10.1.
- b. Open the GeoTagged Photos To Points tool, click the ArcToolbox icon in the Standard toolbar > Data Management > Photos > GeoTagged Photos To Points Hint: Use the Search window with the keyword "photos."
- c. In the Geotagged Photos to Points dialog box, click on the **Folder Icon** next to the Input Folder box and navigate to the folder containing your photos.
- d. Next to the Output Feature Class box, click the **Folder lcon** and browse to the new file geodatabase and name the output accordingly.
- e. To use the Invalid Photos Table option click the **Folder lcon** next to the box and navigate to your new file geodatabase. Name the output table accordingly.







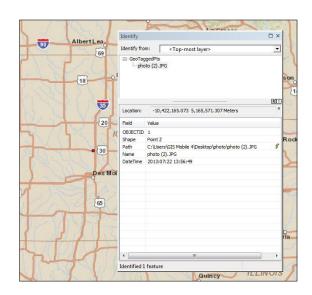
- f. To include all photos as records in the output feature class, check the **Include Non-Geo Tagged Photos** box.
- g. Uncheck the box for **Add Photos As Attachments**. This will allow the process to run faster, especially if your folder contains a large number of photos. Checking the box would copy the photos into the file geodatabase.
- h. After completing all the required inputs click **OK**.

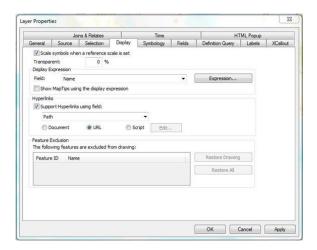
#### 4. How to access mapped geotagged images

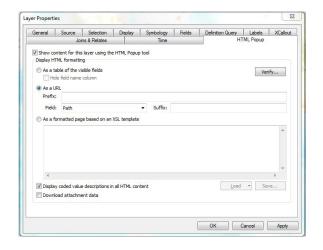
- a. Identify cursor: Click on the Identity Cursor Icon and use the cursor to select a point. The Identify window will pop up. By clicking the Hyperlink Icon at the end of the Path Value field the image will open up in your default image viewer.
- b. **Hyperlink tool:** First right click on the point feature layer in the Table Of Contents and click **Properties**. Select the **Display** tab at the top of the dialog box and check the **Support Hyperlinks using field**. In the drop-down menu select **Path** and check **URL**. If you leave the default **Document** checked, the hyperlink tool will open your photo in a default image editor such as Photoshop. Click **OK**. Click on the **Hyperlink Icon** and use the cursor to select a point and view the image in a web browser.
- c. HTML Popup tool: Use to select points and view the photo within the ArcMap document. Right click on the point feature layer in the table of contents and click Properties. Open the HTML Popup tab and select As a URL. In the dropdown Field option select Path. Click Verify to test the path. Click OK.

#### New with 10.2

The GeoTagged Photos To Points tool now adds a direction field to the output table with a value between 0 and 359.99. If the device does not have this capability, a value of -9999 will be produced in the direction field.







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