Exercise 5 – Creating, Exporting and Importing Metadata

Session Objectives: At the conclusion of this session, you will be able to:

- ❑ Create and add attachments to records in a table.
- ❑ Create new metadata for geodatabase feature class using ArcCatalog.
- ❑ Export and Import metadata from a geodatabase feature class using ArcCatalog 10.

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Revision: November 2013

Software: ArcGIS 10 SP5

Directory Path: C:\ or D:\CSP7200\Exercise4 and Exercise5

Data: Weed_Project_Summary.docx, Metadata.docx in Exercise5

GDB: Weed_Project.gdb in Exercise4

MXD: Weeds.mxd from Exercise4

TASK 1 – Creating Attachments to Annotate Records in a Feature Class

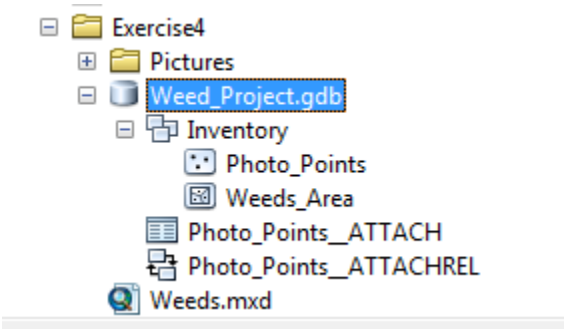
Yesterday you created a geodatabase for an invasive weed species monitoring project on the NCTC campus. You also learned how to add a picture to a record (i.e., a single row or feature in a table) in the Photo_Points feature class. Today, you'll learn how to create an attachment to add multiple pictures to a single record. You'll also learn how to attach documents for annotation. This is smart way to create user defined metadata.

All data are located in the **CSP7200\Exercise4** folder, unless otherwise stated.

1. Open the **Weeds.mxd**.

2. To add an attachment, we first need to create a location to store the attachments. The location is an auto-generate table that is linked to the feature class via a logical link known as a relationship class.

   - Open ArcCatalog from the side bar. Right-click on the **Photo_Points** feature class and select **Attachments > Create Attachments**. Notice the new table and relationship class.



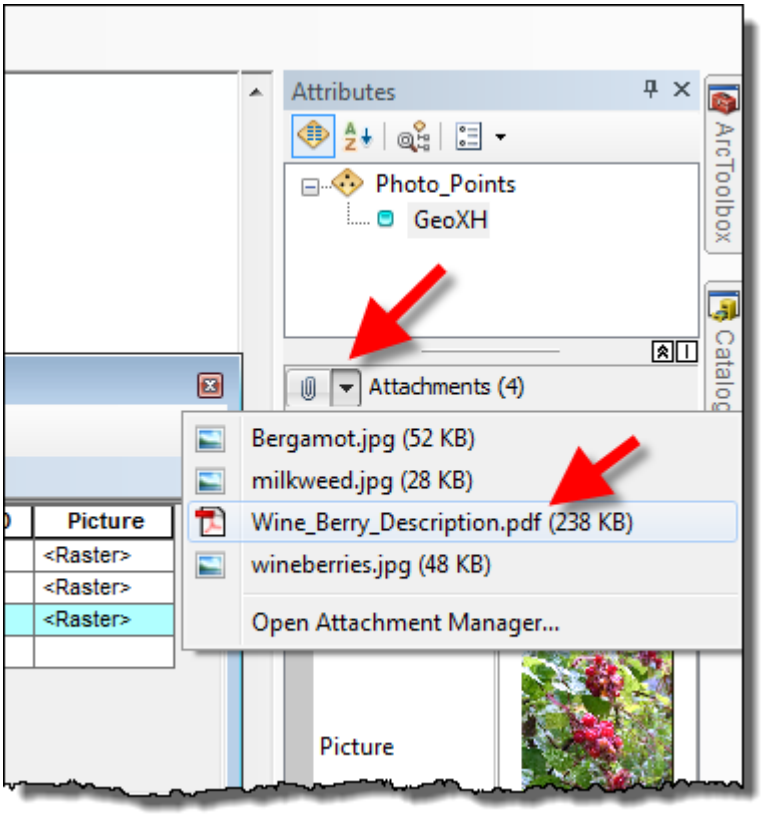
   - Open the new table. What field will the attachments be stored in and what data type is it_____?

3. To add attachments, simply start and editing session and open the **Photo_Points** attributes table.

   - Right-click on one of the records (the far left grey cell) and select **Open Attachment Manager.**

   - Click the Add button and browse to the Pictures folder in Exercise2. Select all the pictures and the **Wine_Berry_Description.pdf**. Click Add again and OK to load all the items.

4. To view the attachments, click on the attachment icon on the editing template and click on any of the attachments.



5. Stop editing, save edits and close ArcMap.

6. Attachments can be very useful to annotate records in a table. Next we'll show you how to create "official" metadata for the feature class.

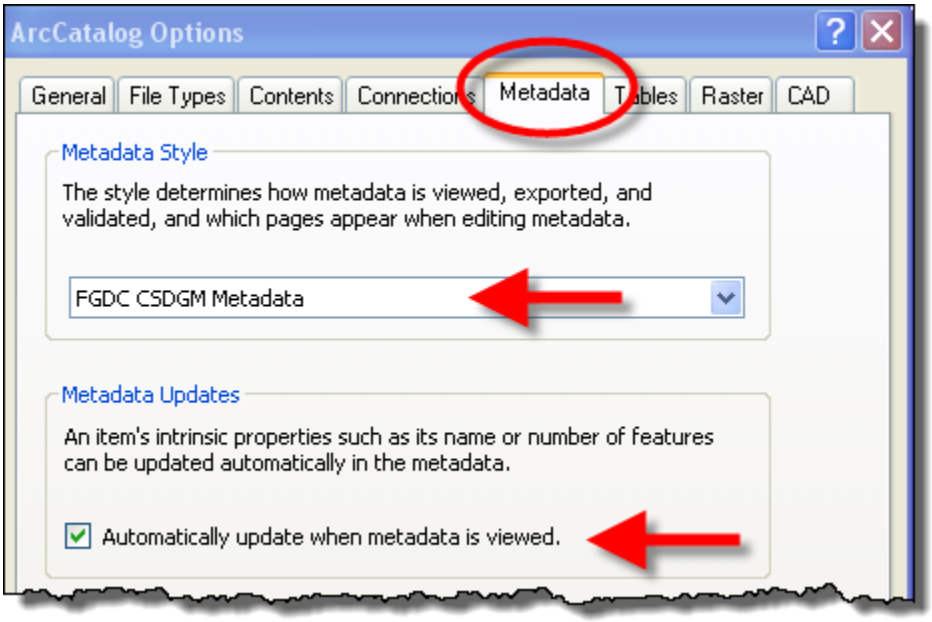
TASK 2 – Creating Metadata in ArcCatalog 10

In this section, you will utilize the metadata editor in ArcCatalog 10 to generate "quick and dirty" metadata for your data layer. Not all the mandatory fields are populated, only the bare minimum. It's possible and recommended to paste text from reports into text fields. A GIS project summary report would be perfect fodder for metadata!

1. Launch ArcCatalog from the desktop.

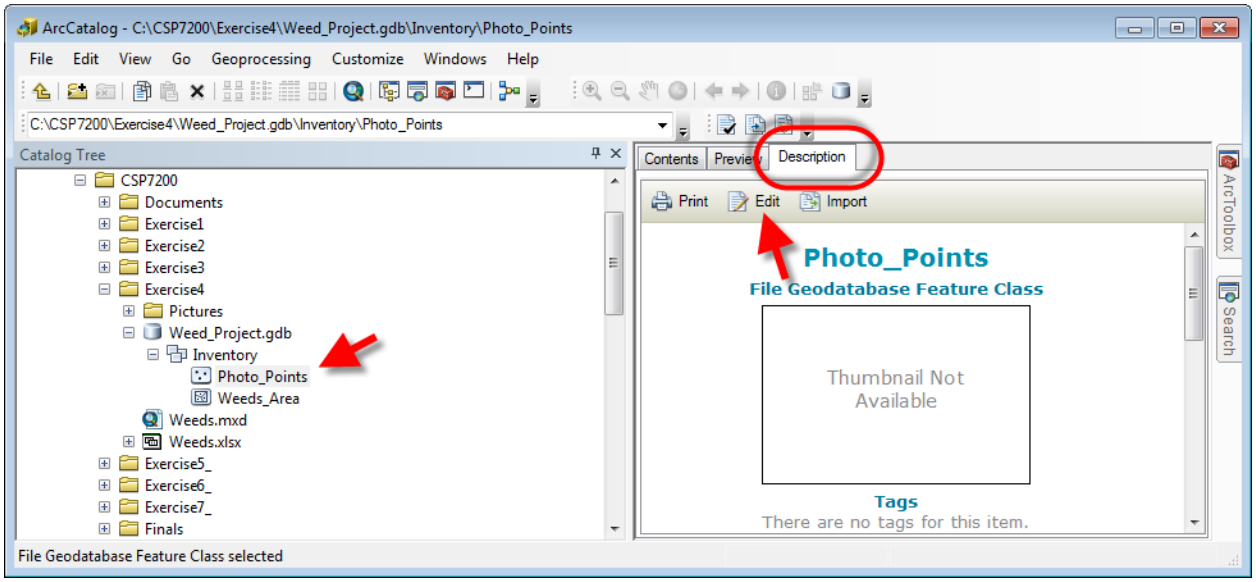
2. From the **Customize** menu, select **ArcCatalog Options.**

3. Click the **Metadata tab** and change the metadata style is **FGDC CSDGM Metadata.** Also make sure that the metadata updates box is checked as shown below. Click **OK**.



4. In the catalog tree on the left hand side of the screen, navigate to the **Weed_Project.gdb**.

5. To start editing metadata, simply highlight the **Photo_Points** feature class, select the **Description** tab and select the **Edit** tool Edit in the Items Description window. See the example on the next page.



7. Open the **Metadata** Word document in the **Exercise3** folder. Copy the **blue** text items and paste in the appropriate sections.

   Click **Item Descriptions** in the Overview section and add the following items:

   Tags – add subject keywords separated by commas.

   USFWS, NCTC, Weeds, Inventory, Trimble GeoXH

   Summary – add a brief summary of the data.

   GPS field data collected as part of the GIS Project Design I class (CSP7200) in December 2013. Data were collected via a Trimble GeoXH 2008 series GPS receiver running ArcPad 10, Service Pack 2. Averaging was enabled (10 seconds for points, 5 seconds for vertices). A 2 second logging rate was used for streaming line and polygon features. WAAS was enabled to improve accuracy. No PDOP limit was applied. Mission planning was not conducted. Data were Post-processed using Pathfinder Office 5.10.

   Description – add an abstract explaining its data and purpose. Open and copy the text from the **Inventory_Project_Summary** Word document in the **Exercise3** folder and paste in this field.

Note: you can also add a hyperlink to any web document. To do this, type a word like "Description", then highlight the text and click the hyperlink tool . Next copy and paste this web address in the field and click **Apply**.

Credits – add the person(s) name or organization name.

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Use Limitations – add the following statement:

Although these data and information have been processed successfully on a computer system at the USFWS, no warranty expressed or implied is made regarding the accuracy or utility of the data and information on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data, and information, and aggregate use with other data and information. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data and information. The USFWS shall not be held liable for improper or incorrect use of the data and information described and/or contained herein.

8. Select **Topics & Keywords** and fill-out the following sections:

   Topics - check the **Biota** and **Environment** boxes

   Theme Keywords – add keywords separated by commas

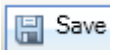
   Weeds, Inventory, Photo Points

   Place Keywords - add keywords separated by commas

   National Conservation Training Center, WV

9. Click on **Citation Contacts** and type your contact and contact information.

10. Click on **Details** in the Resource section and change the New Status to **Completed**.

11. Click the **Save** button 

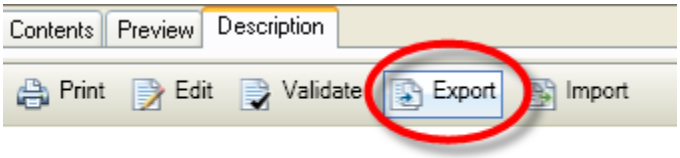
when finished.

12. To add a thumbnail image to your metadata, simply click on the **Preview Tab** and select the **Add Thumbnail** icon on the Geography Toolbar. Click back on the **Details Tab** to view the thumbnail.

Congratulations! You just created metadata for your GIS data. The next sections show how you can export this information and use it as a metadata template for other datasets to save time.

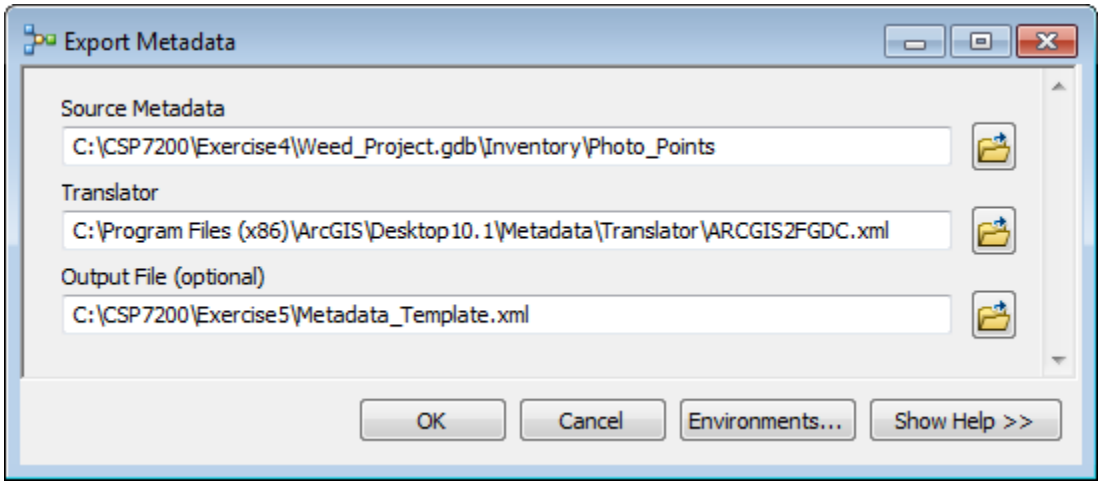
TASK 3 – Exporting Metadata in ArcCatalog 10

1. Highlight the **Photo_Points** layer and select **Export** from the **Description Tab**.



2. In the Translator field, browse to the **ArcGIS2FGDC.xml** translator file located in the **C:\Program Files (x86)\ArcGIS\Desktop10.0\Metadata\Translator** folder.

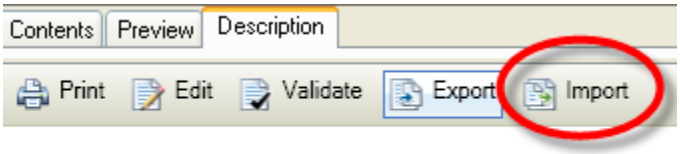
   - Save your file as **Metadata_Template.xml** in the **Exercise5** folder. See the example below. <u>You will need to type the **.xml** extension in the file name!</u>



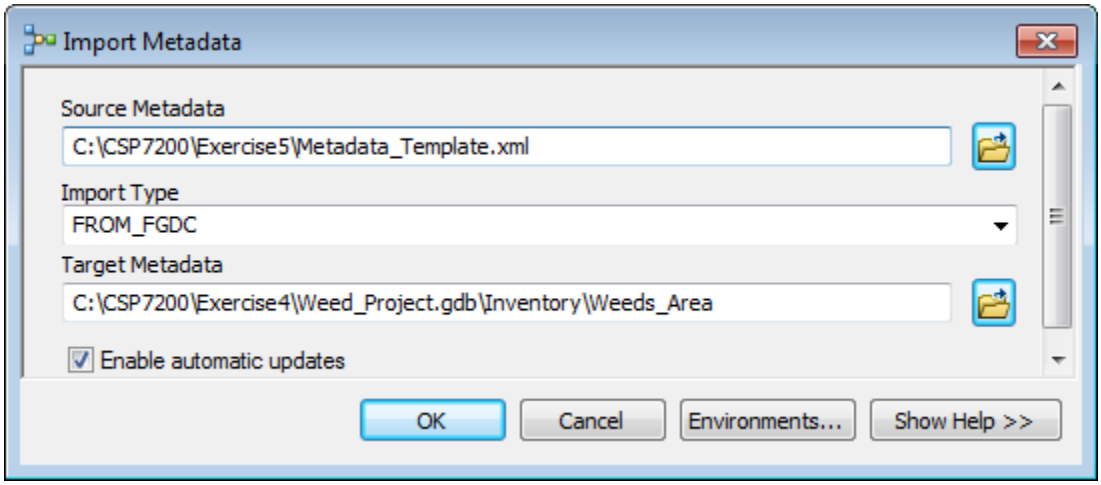
3. Click **OK** and **Close**. You should see the **Metadata_Template** file in your table of contents. If not, then click **View > Refresh** on your main toolbar.

TASK 4 – Importing Metadata in ArcCatalog 10

1. Highlight your source layer, use **Weeds_Area** for this example, and select **Import** from the **Description** Tab.



2. Change the Import Type to **FROM-FGDC** and click **OK** and **Close**. You will have some green errors because not all the mandatory FGDC fields are filled-out.



3. View your new metadata. Did everything come over correctly?

For more information on USFWS metadata standards, useful metadata tools and templates, go here:

http://www.fws.gov/stand/standards/pr_biomet_WWW.html