

Importing Natural History Specimen Records to ANCS+

NPS Natural History Import for ANCS8.doc, November 2007, 4 Pages

Contract catalogers or others who collect and document natural history specimens at units of the National Park Service may need to prepare data files that can be imported into ANCS+, the museum collection management system for the National Park Service. If you are cataloging Natural History (Biology, Geology, or Paleontology) specimens for National Park Service collections, this document will help you.

First acquire a copy of the pertinent chapters of the NPS ANCS+ User Manual. Download it by chapter at <http://www.cr.nps.gov/museum/publications/anacs.html>.

You will need:

"Chapter 8: Moving & Sharing Data". Refer to Section IV, Import/Export Selected Fields, which explains the import/export process.

"Chapter 2: Cataloging a Biology Specimen", or

"Chapter 2: Cataloging a Geology Specimen", or

"Chapter 2: Cataloging a Paleontology Specimen" each of which describe the mandatory and optional data fields, with field-by-field descriptions, approved values, and formatting.

Note: You may also want to request our generic import/export directions. They do not include the NPS-specific guidelines on required fields, formatting, etc. listed below, but do include the step-by-step directions for importing and exporting if you are unfamiliar with the process.

Basic Steps

1. We recommend that you start with an export template created from ANCS+. Using the Import/Export Selected Fields function, you can choose the mandatory and required fields you need to use, export one record, and use this as a template to begin cataloging. All ANCS+ systems include a standard "NHIMPORT" template, or you can create your own. Most park curators should be able to help you do this. The export file is a delimited text file (.txt) or comma separated value (.csv) file, either of which can easily be opened or imported into MS Excel or MS Access. If you have already created databases in Excel or Access, you will likely have to modify them to successfully import your data into ANCS+.
2. After entering your data in MS Excel or MS Access files, you will save the data in a comma separated value (.csv) or text (.txt) format. ANCS+ will import delimited text files (*.txt or *.csv files), but not Excel (*.xls) or MS Access (*.mdb) files. It's easy to save an Excel file as a .csv file (from within Excel, choose File, Save As, etc.). MS Access will let you save or export the data in .txt or .csv format.
3. Import your data into ANCS+, using the program's Import/Export Selected Fields function. If your incoming data file is formatted correctly, the data will import successfully, creating NPS museum catalog records in ANCS+. Note: The last section of this document describes common mistakes that you should avoid.

Mandatory Fields

ANCS+ includes a number of mandatory fields that must contain data for the catalog record to be considered complete. These fields should be filled in by the cataloger. In some cases the

cataloger may need instruction from the park curator how to fill in certain of these fields (such as Condition, or Controlled Property). Below are listed the mandatory fields for all NPS Natural History catalog records. Please refer to ANCS+ User Manual Chapter 2: Cataloging, for a complete description of each of these and the other optional data fields.

Mandatory Fields for Natural History catalog records in ANCS+	
Catalog #	
Accession #	
Cataloger	
Classification Lines 1-4 (Includes Kingdom, Phylum/Division, and Class)	
Collection Date	
Condition	
Controlled Property	
Formation (Geology only)	
Identified By	
Location (where the specimen is stored, etc., not where it was found).	
Object Status (whether the object is in storage, on exhibit, on loan, etc.)	
Status Date (the fiscal year it was placed in storage, on exhibit, etc.)	
Scientific Name (includes Genus, Species, etc.)	
Storage Unit (either "EA" for individual specimens, or BAG, BOX, etc. as appropriate)	
Item Count or Quantity (Item Count if individual specimens, or Quantity if in bags, boxes, etc.)	
Latitude/Longitude, Township/Range/Section, or UTM Coordinates.	

Fields with Special Formatting

Some fields in ANCS+ require special formatting. When entering data in ANCS+, the program controls the data format in these fields. This control isn't available in MS Excel or MS Access, so the cataloger must ensure that the correct format is used. Failure to use the proper formatting can cause the import to fail, or can cause additional cleanup work for the park curator. **Note:** for valid entries for fields controlled by authority tables, please refer to the ANCS+ User Manual Chapter 2: Cataloging.

Catalog #	<p>Format: AAAAA9999999. A standard NPS catalog number includes a 4-letter park acronym (with a rarely used optional fifth letter), plus a unique number of up to 7 digits, spaced so the last digit is always in the 12th character space. For example: "PARK 1234567", or, "PARK 1".</p> <p>The Park you are working with should provide their acronym and a list of numbers for your use.</p>
Accession #	<p>Format: AAAA-99999. A standard NPS accession number includes a 4-letter park acronym, a hyphen, plus a number of up to 5 digits, padded with zeros and spaced so the last digit is in the 10th character space. For example "PARK-12345", or, "PARK-00001".</p> <p>The Park you are working with should provide their acronym and one or more accession numbers for your use. Accession numbers indicate groups of records, so are not unique for each catalog record.</p>
Classification Lines 1-4 (Class 1-4, or Kingdom,	Refer to the ANCS+ User Manual Chapter 2: Cataloging, and the NPS Museum Handbook Part II, Appendix H: Natural History and

Phylum/Division, and Class)	the Hierarchical Classification Outline (HCO). The Class 1 field is always Biology, Geology, or Paleontology. The Geology discipline uses Class 2-4 and the HCO terms. Biology and Paleontology disciplines use the ITIS taxonomy in the Kingdom, Phylum/Division, Class, Order, and Family fields.
Condition	Condition of the specimen. ANCS+ includes a list of valid entries. "COM/GD" (for Complete/Good) or "COM/FR" (for Complete/Fair) are usually acceptable for recently collected specimens.
Scientific Name	Contains a set of subfields such as Genus, Species, Subspecies, etc. If importing the whole field (one column in your Excel or Access table), use a space-underscore-underscore delimiter to separate each subfield. For example: "Genus name __Species Modifier __Species name". If using separate columns for each subfield in your Excel or Access table, the column headers should match this format: Sci. Name:Genus Sci. Name: Species, etc.
Storage Unit	Either "EA" for individual specimens, or BAG, BOX, etc. as appropriate
Item Count or Quantity	Item Count if individual specimens, or Quantity if in bags, boxes, etc.
Latitude/Longitude	Contains a set of subfields for degrees, minutes and seconds of latitude and longitude, but all data can be entered without the underscore delimiters and the data will import acceptably.
Township/Range/Section	Accepts a 5-character township, 6-character range, 3-character section, and 2-letter abbreviations for each quarter section: "T.12345 __R.ABC123 __Sec.123 __NE 1/4 __SW 1/4 __SE 1/4". Use the space-underscore-underscore delimiters if importing as a single column, or use separate columns with column headers in the format: TRS:Township TRS:Range TRS:Section, etc.
UTM Coordinates	Formatted to accept 2 digits, a slash, 6 digits, a slash, and 7 digits: "12/123456/1234567"

Formatting Your Data File

- The Catalog number (Catalog #) must be the first column in your file. Catalog number is the unique key that ANCS+ uses to match up existing records with the incoming data, so that records can be updated as well as added to the database.
- The column headers in your file must match the fields selected in the ANCS+ Import/Export template. The easiest way to accomplish this is to start with a template exported from ANCS+. Otherwise, you can edit the column headers in Excel or Access (or in your txt or csv file), so that they match.
- The columns must be in the same order in your file as they are in the ANCS+ Import/Export template. Your file must not contain extra columns, for data that will not be imported into ANCS+. It should also not be missing any columns (fields) that are included in the ANCS+ Import/Export template. Otherwise the import process will not be able to match the fields.

Tip

If the template does not match the incoming data, you may want to use your template to export one record. Then use that exported file to compare the field order, field names, etc. to your incoming file. You can copy the column header row of the exported record to your incoming data file, to make sure they match exactly.

Common Mistakes

- The most frequent mistake we see is having column headers that don't match the Import/Export template in ANCS+, either due to typos, or due to having extra columns in Excel or Access that don't have a match the ANCS+ Import/Export template. Edit the column headers in the incoming file so they match the template. Remove columns from your incoming file that won't be imported to ANCS+.
- The Catalog # field should be the first column in your incoming file, and the first field in the ANCS+ Import/Export template. This ensures that data being imported to update existing records will find the matching record, and update it. Catalog # is the unique key field by which NPS catalog records are identified.
- Incorrect formatting of the Catalog number and/or Accession number fields. If the catalog number is incorrectly formatted, the imported records may not sort correctly. The most frequent formatting mistake for Catalog numbers is an incorrect number of spaces between the acronym and the number. The most common mistakes in Accession numbers are omitting the hyphen between the acronym and the number, and failing to pad the number with zeros.
- Incorrect terms used in fields controlled by ANCS+ authority tables. For example, a condition of "Complete" rather than "COM/GD" or "COM/FR. Or an object status of "in storage" rather than "STORAGE". Review the acceptable authority terms for such fields in Chapter 2 of the ANCS+ User Manual. Using incorrect terms in your Excel or Access file, and importing them to ANCS+, will create additional work for the park curator to correct the data.
- Importing blank columns will "update" the matching field with a blank. Do not import blank columns when your import is intended to updated existing ANCS+ records, unless you intend for the import to set the matching field to blank.