



DAILY METADATA TAGGING

CATEGORIES AND KEYWORDS

OVERVIEW:

While the IPTC Core metadata standard provides numerous fields that you can use, here are the critical ones that each of your media items should use.

Creator: your name

Headline: title for the documentation project this item belongs to

Keywords: see "Keywords List"

Copyright Status: set to Copywrited or Public Domain

The screenshot shows a dark-themed interface for IPTC Core metadata. The fields and their values are as follows:

- Creator**: Karl-Jon Sparrman
- Creator: Job Title**
- Creator: Address**
- Creator: City**
- Creator: State/Province**
- Creator: Postal Code**
- Creator: Country**
- Creator: Phone(s)**
- Creator: Email(s)**
- Creator: Website(s)**
- Headline**: Woolen Mills dam site survey
- Description**
- Keywords**: hydrology; dam; post-industrial; sediment; river
- IPTC Subject Code**
- Description Writer**
- Date Created**: 6/6/18, 11:57:45 AM
- Intellectual Genre**
- IPTC Scene Code**
- Sublocation**
- City**
- State/Province**
- Country**
- ISO Country Code**
- Title**
- Job Identifier**
- Instructions**
- Credit Line**
- Source**
- Copyright Notice**
- Copyright Status**: Public Domain
- Rights Usage Terms**

EXIFTOOLS + EXCEL

BATCH METADATA EXTRACTION

OVERVIEW:

Exiftools is a command-line tool that allows us to read, write, and export the metadata contained in media files¹. We will use this tool through the computer's command-line, which is an interface for writing and executing commands for your computer as text. On MacOS, use the Terminal application, on Windows, use the Command Prompt application (both of these applications are built into your operating system).

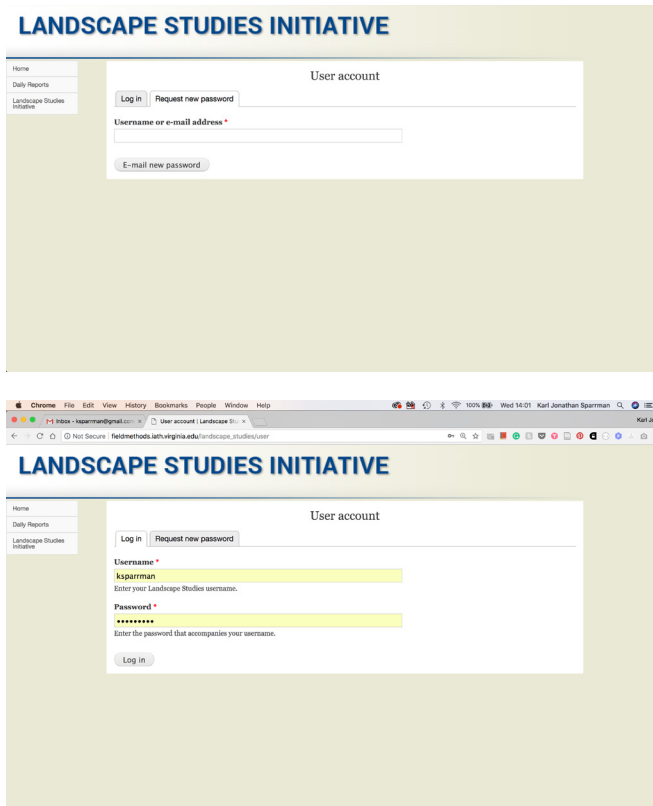
BASIC COMMAND LINE USE:

The command line is a powerful tool, allowing you to very directly read, write, and manipulate files on your computer. In fact, before graphical user interfaces (GUIs), it was the only way that you interacted with a computer. We will be utilizing a few basic commands to navigate through the files on our computer and perform operations with Exiftool. See these resources for a list of commands that you can enter into the command line:

MacOS command-line cheat sheet: <https://gist.github.com/poopsplat/7195274>

Windows command line cheat sheet: <http://simplyadvanced.net/blog/cheat-sheet-for-windows-command-prompt/>

The most important command will be “cd” which means “change directory”. Before running Exiftool to extract image metadata we want to navigate to the folder (directory) where those images are stored.



¹ You can read more about the tool and download it here: <https://www.sno.phy.queensu.ca/~phil/exiftool/>

USING EXIFTOOLS:¹

We will use Exiftools to create a .csv file (comma-separated values file, essentially a table of values) that contains all the metadata from a batch of images. To do this, use the command-line to navigate to the folder where your images are saved:

```
cd [path to directory]
```

(Omit brackets in the command). Hit enter. To add the path to a directory, you can simply drag that folder to the command line after typing "cd".²

Now that you are in the correct directory, type:

```
exiftool -csv ../[directory-name] > [filename].csv
```

...where [directory-name] is the name of the folder where your images are stored (and where you have navigated to) and [filename] is the name for the newly exported metadata. Hit enter.

If everything has worked correctly, a new .csv file will appear in the directory out of which you are working. It will contain a table with metadata for every file³ in the open directory.

We will be uploading this .csv file alongside a zipped file of our images at the end of each day.

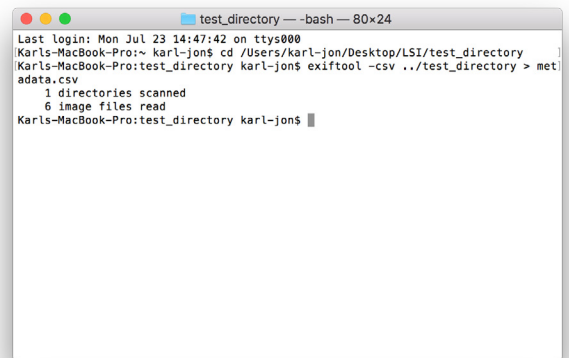
USING EXCEL TO EXTRACT UNIQUE KEYWORDS:

Once you have created a .csv file from Exiftools, we will manipulate that file in excel to extract all the unique keywords used to tag a day's work. This will allow you to copy those keywords - selecting the most important - and add them to the daily report.

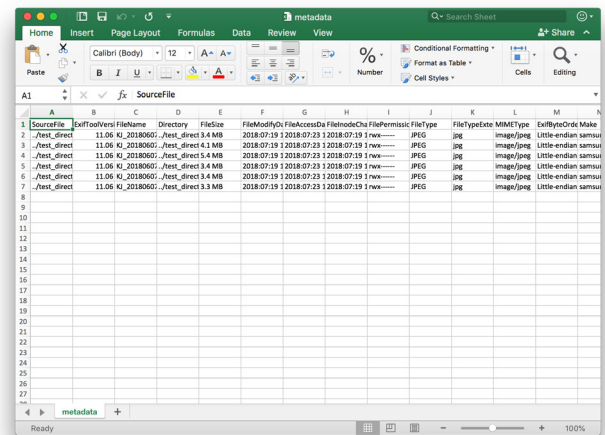
Start by opening the .csv file (select view 'all files' if excel is not showing it as available for reading). To the right of the 'Keywords' column insert a new column (temporary) for concatenating all of the entries together. One below the headers' row, set the first cell to equal the first cell of Keywords entries. In the second cell, set the formula to '=CONCATENATE(cell above, cell to the left)'. Copy this formula down the entire column so that the last cell is set to hold all those keyword entries from every item.

- 1 See this set of tutorials for more information: <https://www.wearevp.com/exiftool-tutorial-series/>
- 2 For more information on navigation in the command-line, see: <https://www.youtube.com/watch?v=j6vKLJxAKfw>
- 3 Every image, video, and/or audio file. Exiftool is often updated and should work with almost any media file you are using. Supported files: <https://www.sno.phy.queensu.ca/~phil/exiftool/#supported>

Using Exiftool

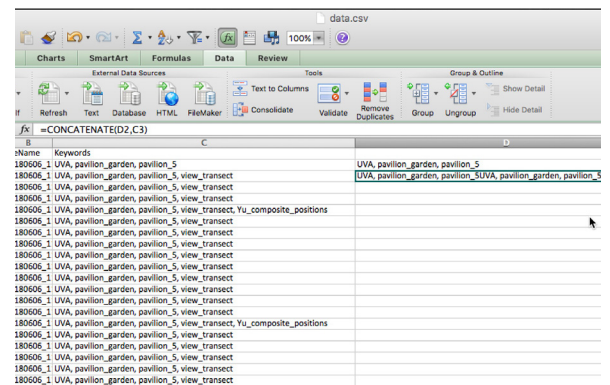


Metadata as a csv file



Generating a composite list of terms_excel, partial sheet

=CONCATENATE(cell above, cell to the left)



Copy that final cell, open a new sheet and 'paste special' to paste in a cell of all the collected values.

To turn this composite string into multiple columns of information, go to the Data tab on excel. Select this new cell of information and click on the 'text to column' button. In the options select 'delimited' for your data-type on options page 1 ; select 'comma', 'space', and 'treat consecutive delimiters as one' in order to separate your terms; and, finally, treat every column as 'text'. Hit finish to convert.

Select all these new cells and copy. Then, below them, in the first column, paste special and 'transpose' the values to get the data in column form. Once you have this column of data, feel free to delete the old rows.

To filter and get unique values, go to Data > 'advanced filter' in the top bar. Select 'copy to another location' at the top and set the existing column of terms as your 'List Range'; select a parallel column of cells for 'copy to' and check the 'unique records only' box. This should give you a column of unique keyword values.

Select the most important keywords, according to conceptual goals, and add to the daily log.

(optional) If you'd like a quantitative count of usage (less important), create a formula as follows adjacent to the first unique value (presuming your new sheet is Sheet1):

=COUNTIF(Sheet1!\$[original column]\$[first cell]:[original column]\$[last cell],[unique value cell])

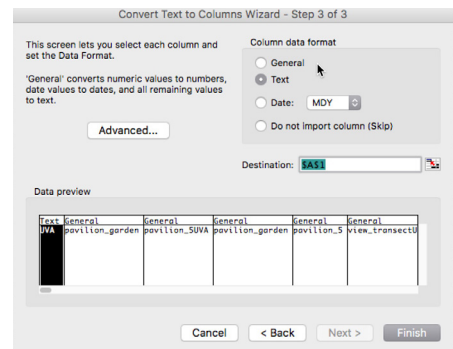
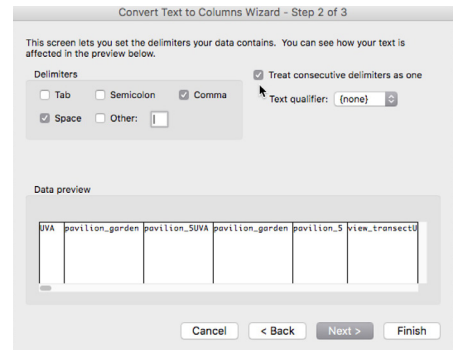
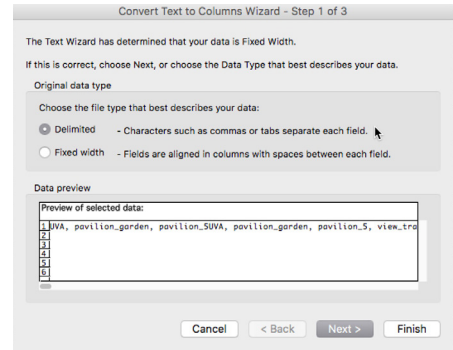
Copy into the cells adjacent to all unique values. Select both columns and sort data by the count, largest to smallest. Copy the count column and paste special as 'values'.

Then feel free to delete the column of all terms (with repetition) and the initial formula-based count. **Save this sheet as a .csv, name [your dataset name]-unique.csv** and acknowledge that you are just saving this sheet, not the entire series. **Use this list when adding important keywords to the overall daily report.**

Count per term: for sorting number of times term are used excel

	A	B	C	D	E	F	G
1	UVA						
2	pavilion_garden	pavilion_garden		251			
3	pavilion_SUVA	pavilion_SUVA		1			
4	pavilion_garden	pavilion_5		183			
5	pavilion_5	view_transsectUVA		26			
6	view_transsectUVA	view_transsect		3			
7	pavilion_garden	Yu_composite_positionsUVA		3			
8	pavilion_5	wall_panUVA		60			
9	view_transsectUVA	wall_pan		1			
10	pavilion_garden	wall_pan_assembled		1			
11	pavilion_5	relative_height		1			
12	view_transsectUVA	relative_topography		1			

Text to Column conversion from data tab excel, options



Data > Advanced Filter: for unique values excel, options

