

Processing Images with Lightroom

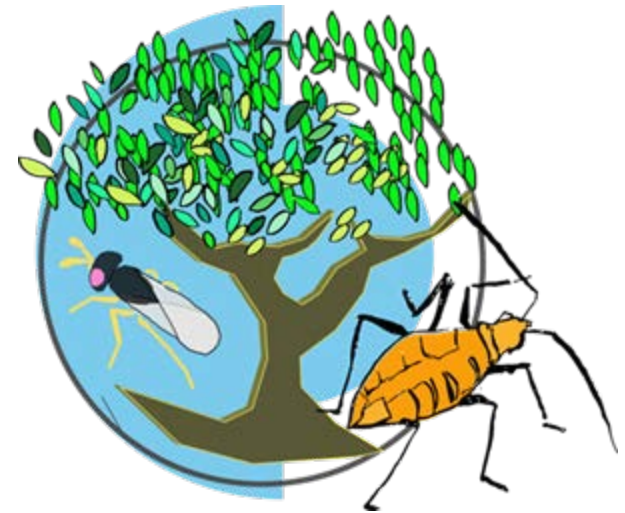
Richard K. Rabeler

University of Michigan Herbarium

TTD - Tri-Trophic Thematic Collection Network

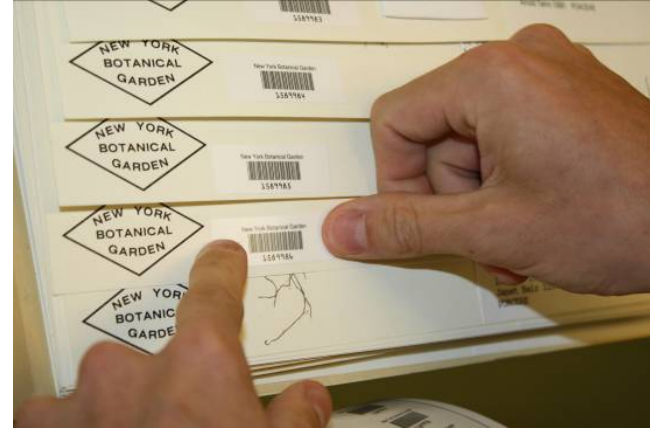
Collaborative Research: Plants, Herbivores, and Parasitoids: A Model System for the study of Tri-Trophic Associations (tcn.amnh.org)

- **Focus:** one of the major herbivorous insect clades, the Hemiptera (aphids, scales, hoppers, cicadas, and true bugs), their host plants (20 families, incl. grasses, sedges, legumes, roses, comps.), and their parasitoids in a Tri-Trophic Databasing and imaging project—the TTD.
- TTD is coordinated by 7 collaborating institutions. Each oversees a portion of the network of another 27 large and small institutions, to capture and deliver specimen data for organisms in all three trophic levels.
- **Goal:** to capture and make available ~4 million specimen records and to unify a total of >7.8 million records.



Botanical Workflow: Barcoding

At all participating herbaria, specimens are barcoded, and skeletal records are created, using “filed-as” names.



Botanical Workflow: Imaging

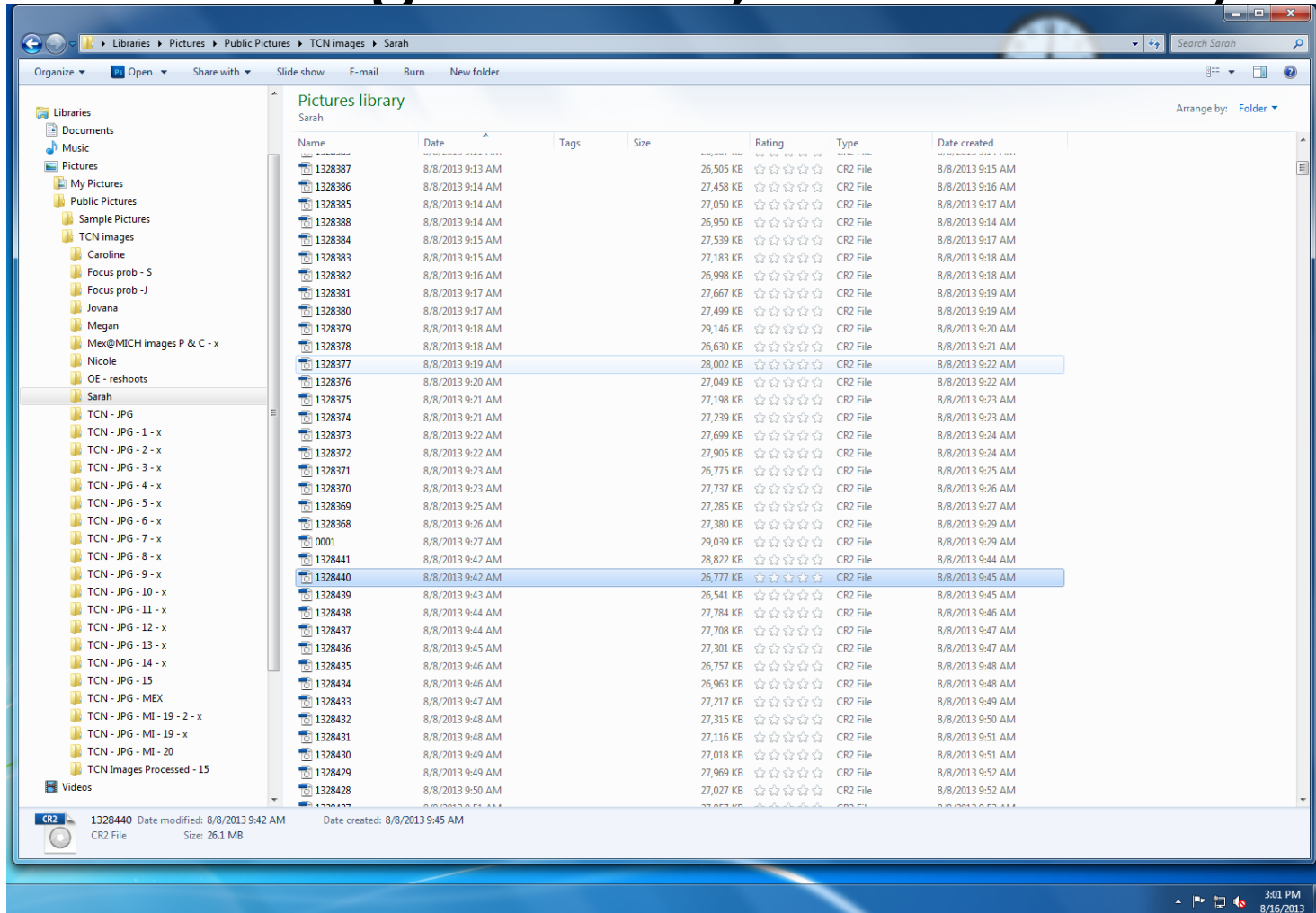


Jovana Sladojevic with light box and specimen carts at MICH

Image Workflow

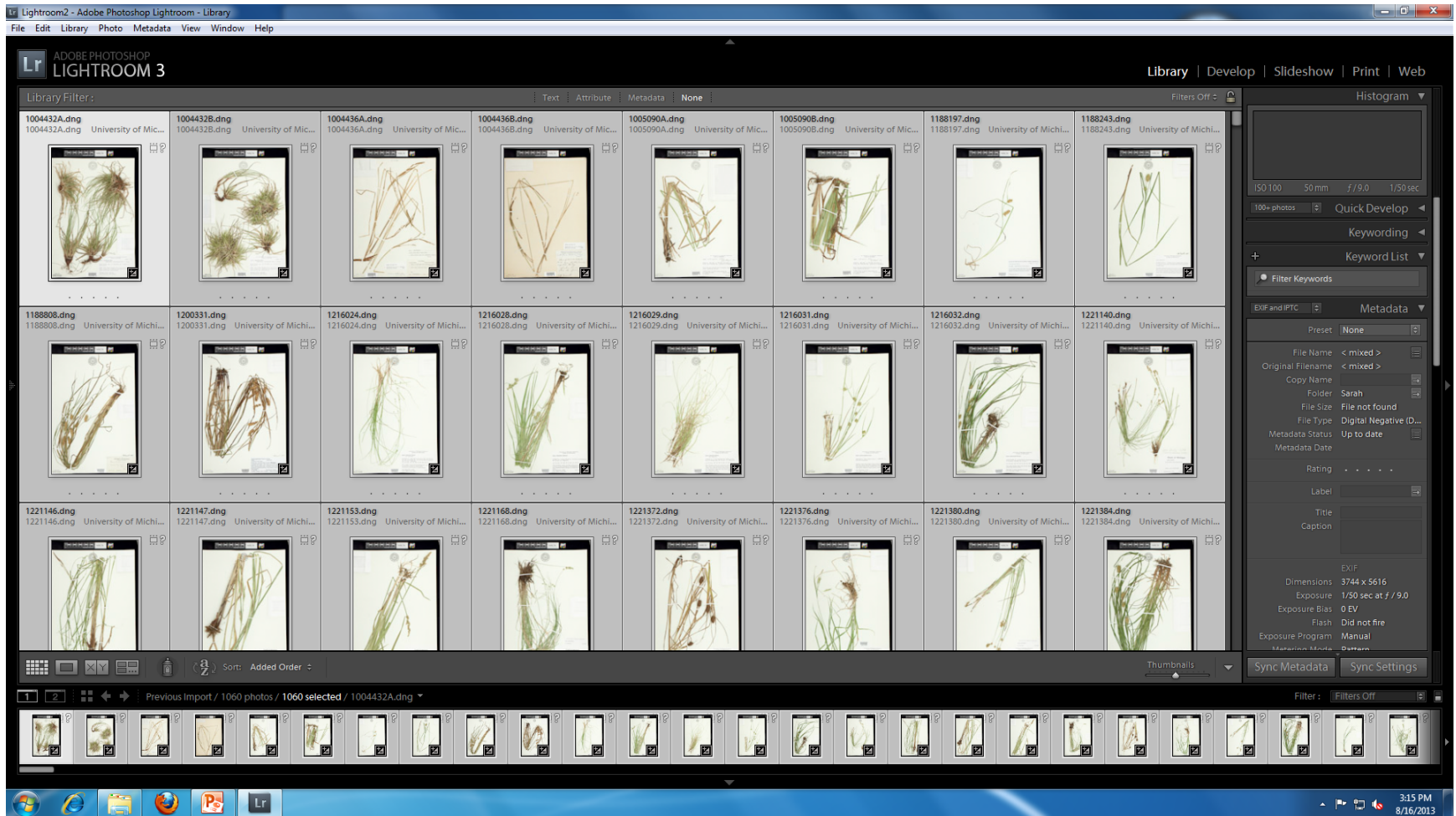
- Check whitebalance on standard color chip at start of imaging session
- Place specimen in lightbox
- Take image using Canon EOS software to remotely control camera from keyboard
- Rename the file via scanning the barcode
- Stamp sheet as “imaged”
- Repeat and repeat and repeat.....

Prior to starting Lightroom – check for name irregularities, check rates, etc.

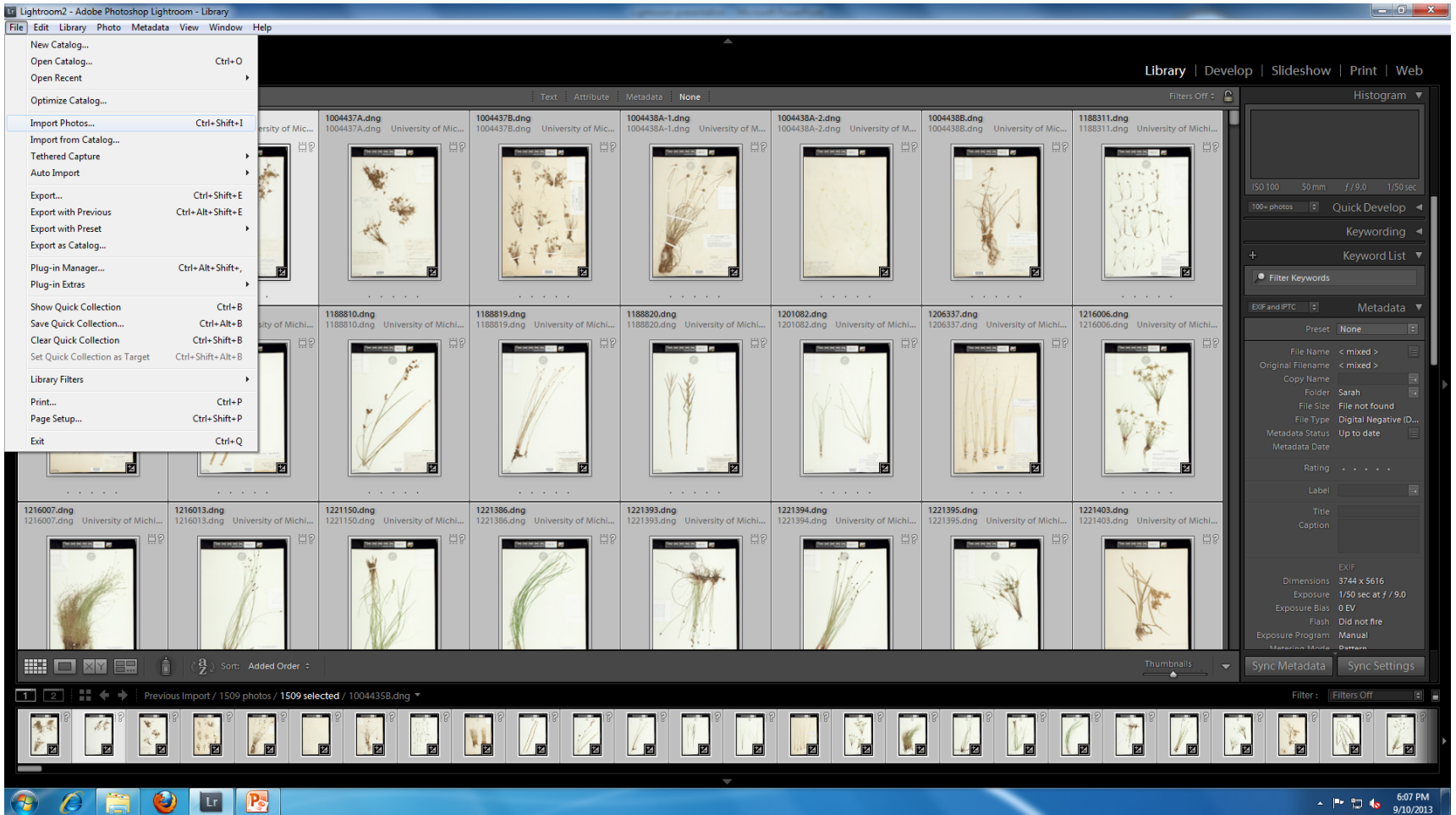


Lightroom 3.6 – opening screen

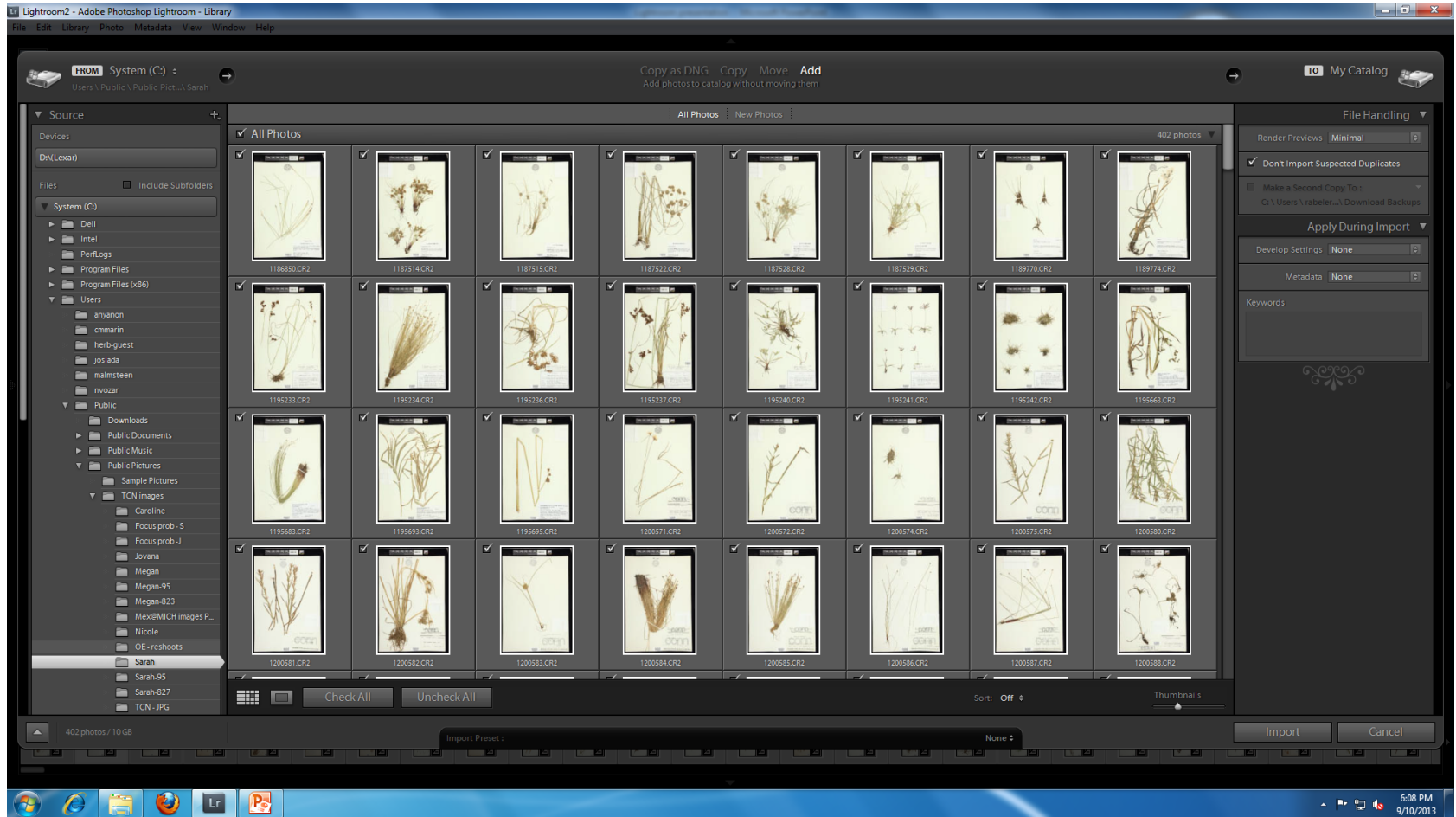
Start in the Library Module



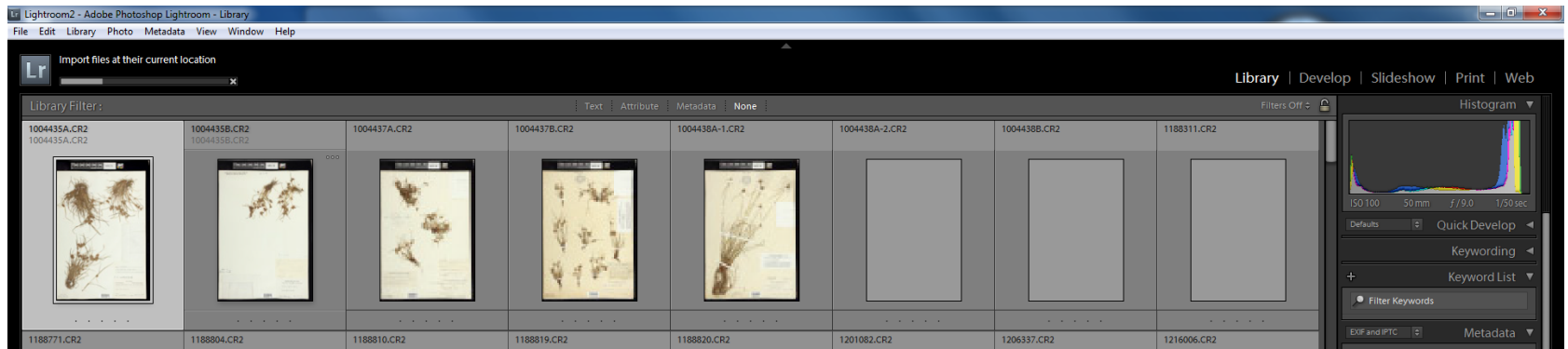
1 – Import photos to be processed



2 – Select source folder; “Check All”, “Import”



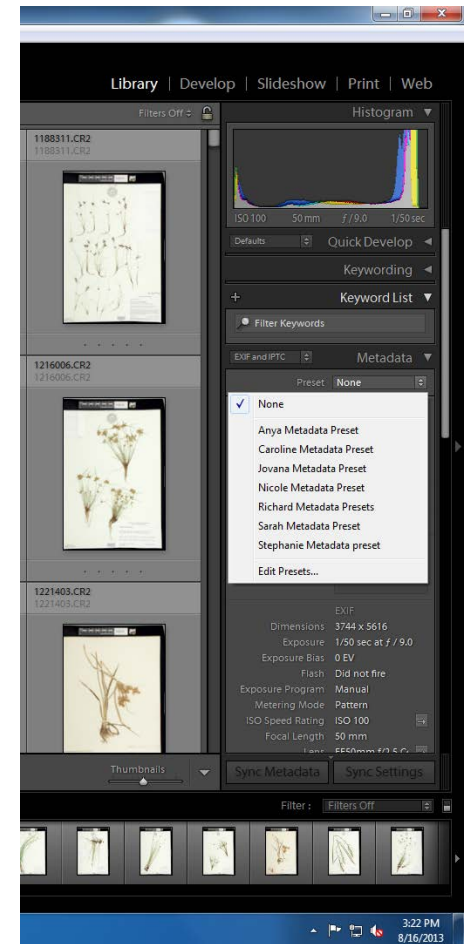
Watching progress of tasks



- Upper left corner of screen shows indications of progress, task completion.
- After images are imported, is easy to scan them quickly for gross problems (exposure, color, etc.)

3 – Select Data Preset to apply

- Under Metadata tab, create a Preset for each user
- Includes name of imager,
 - Copyright info (if desired), etc.



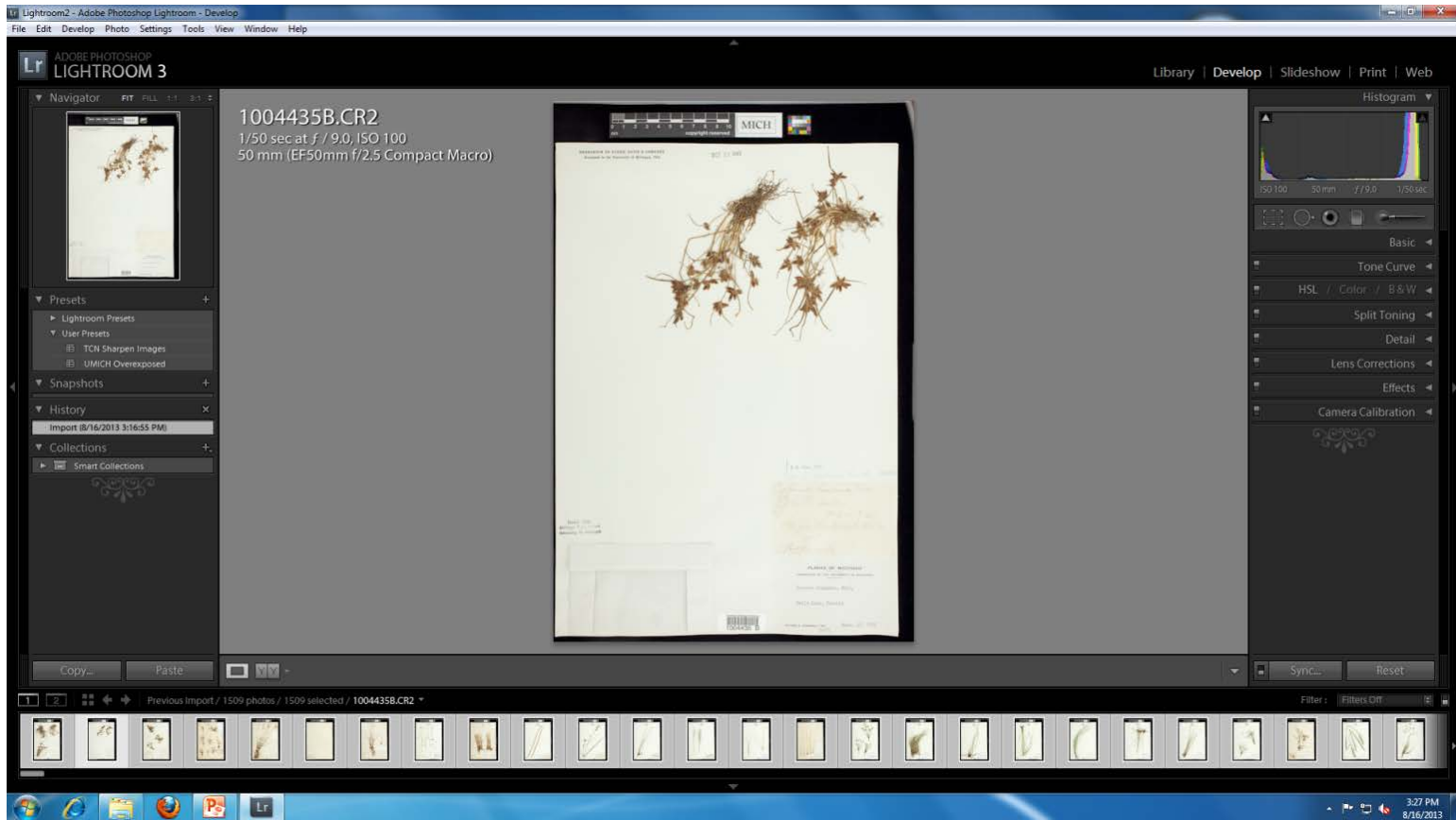
4 - Apply the Metadata Preset

The screenshot displays the Adobe Photoshop Lightroom 3 interface in the Library grid view. A dialog box titled "Apply Metadata Preset" is centered on the screen, asking the user to choose between applying the preset to all selected photos or only the active photo. The dialog includes a "Don't show again" checkbox and buttons for "Active", "All Selected", and "Cancel".

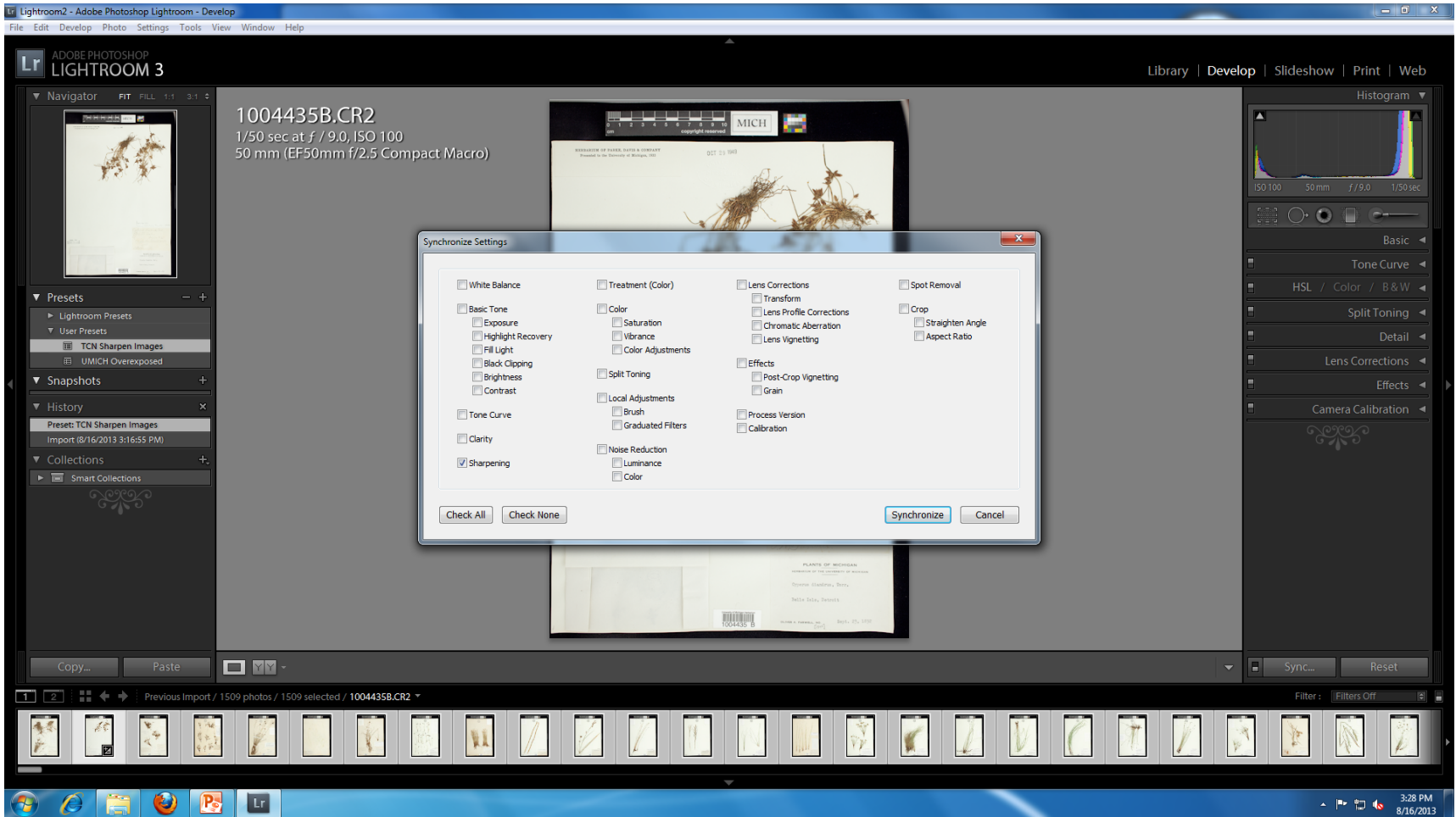
The background shows a grid of 24 botanical specimen photographs. The right-hand panel is open to the "Metadata" section, showing a preset named "Sarah Metadata...". Below the preset name, various metadata fields are visible, including File Name, Copy Name, Folder, File Size, File Type, Metadata Status, Rating, Label, Title, Caption, EXIF, Dimensions, Exposure, Exposure Bias, Flash, Exposure Program, Metering Mode, ISO Speed Rating, Focal Length, Lens, Date Time Original, Date Time Digitized, Date Time, Make, Model, and Serial Number.

The bottom status bar indicates that 1509 photos are selected out of 1509 total in the current import. The system tray at the bottom right shows the time as 3:25 PM on 8/16/2013.

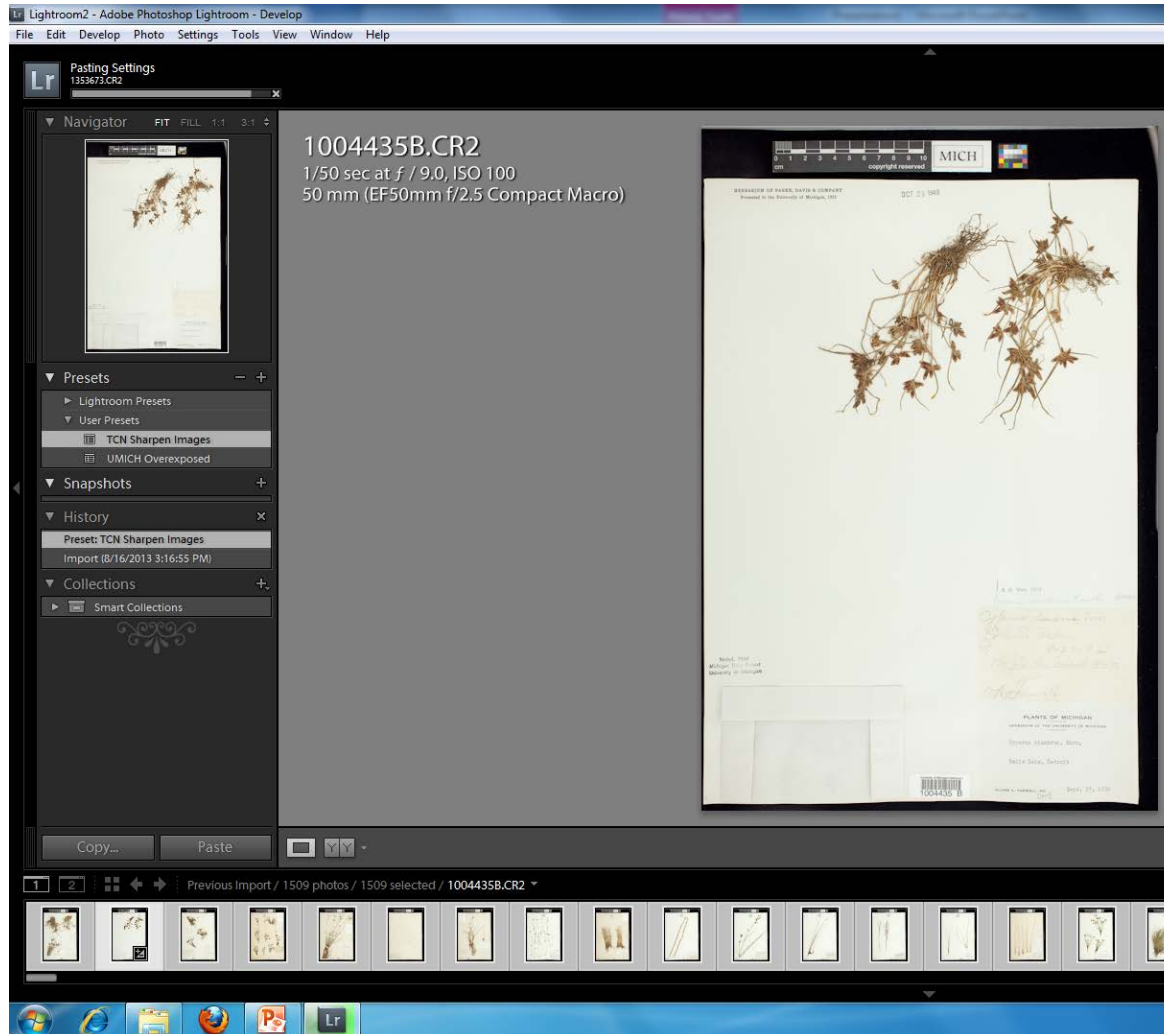
5 – Enter Develop Module, “Select All” if not already done



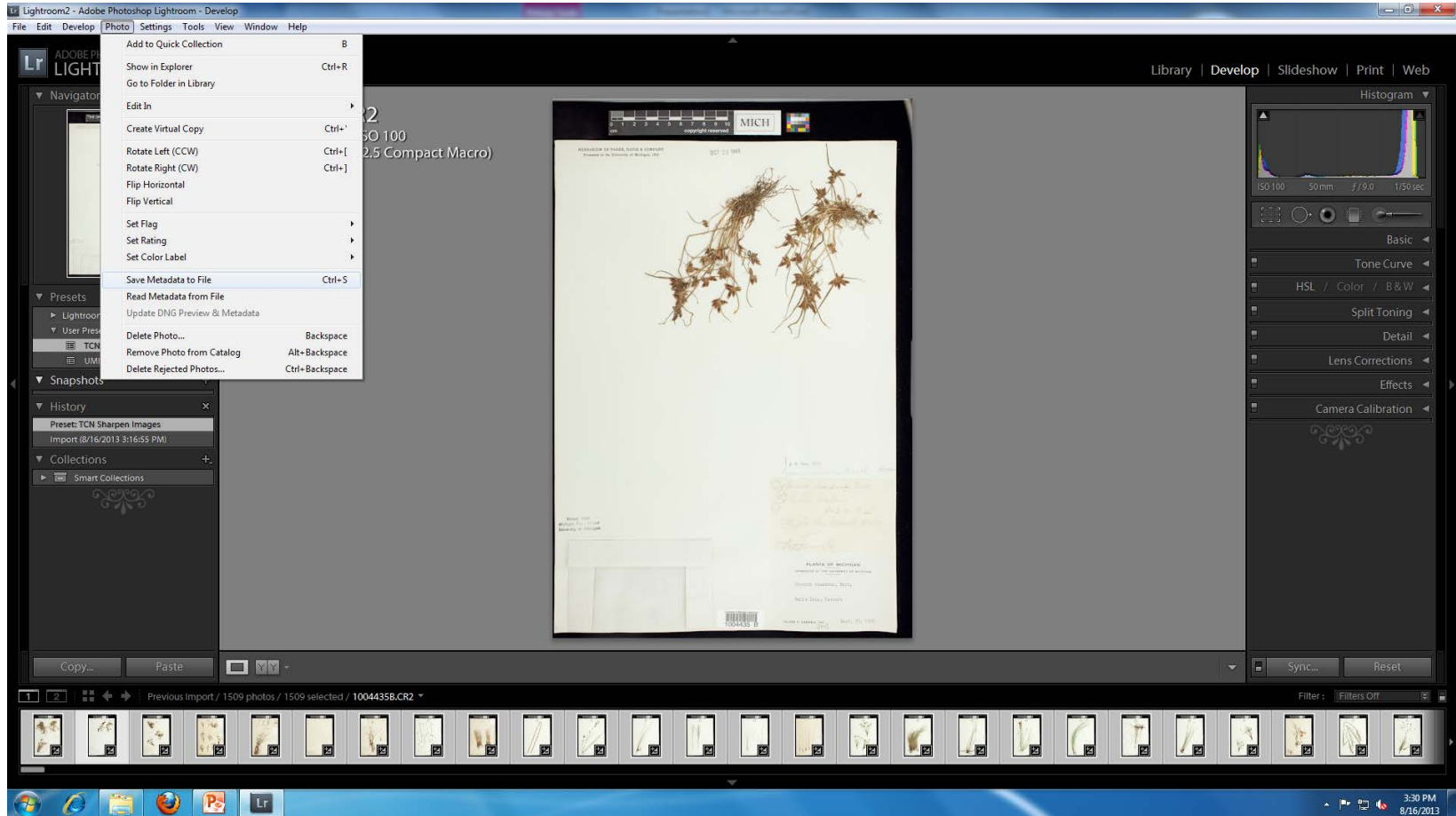
6 – Apply Sharpening preset; “Sync”, “Synchronize”



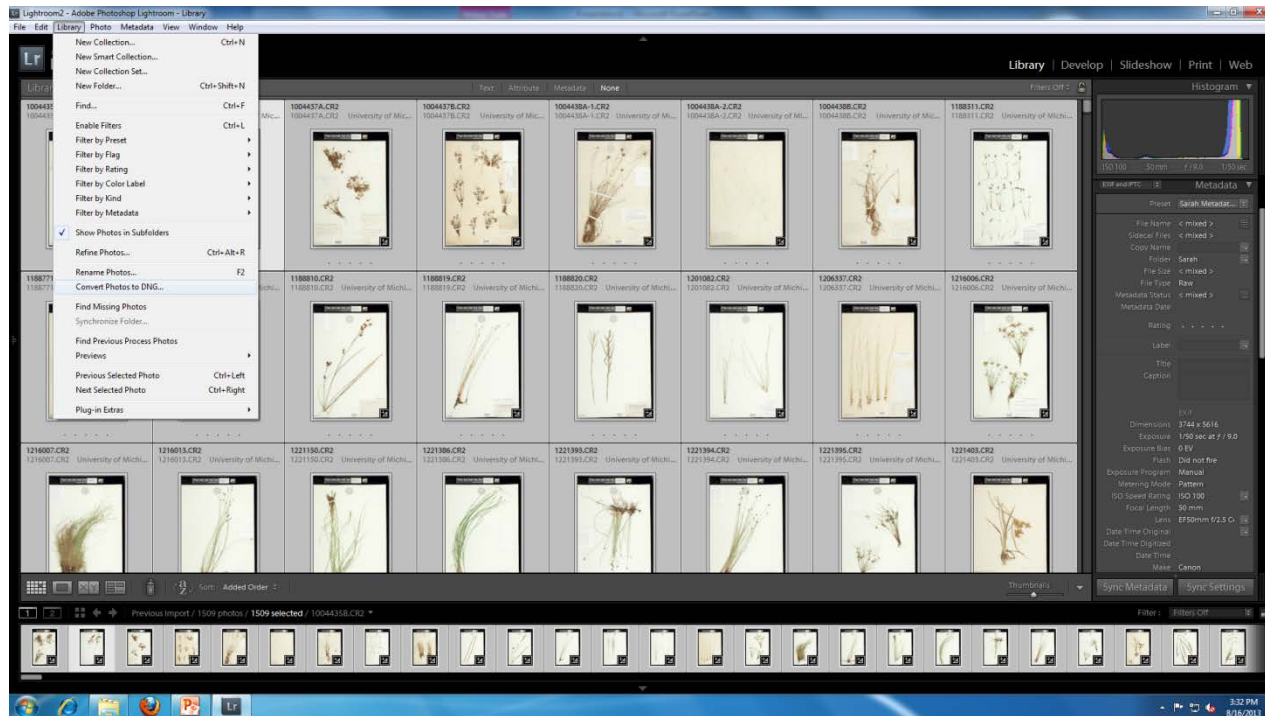
Progress of applying the preset



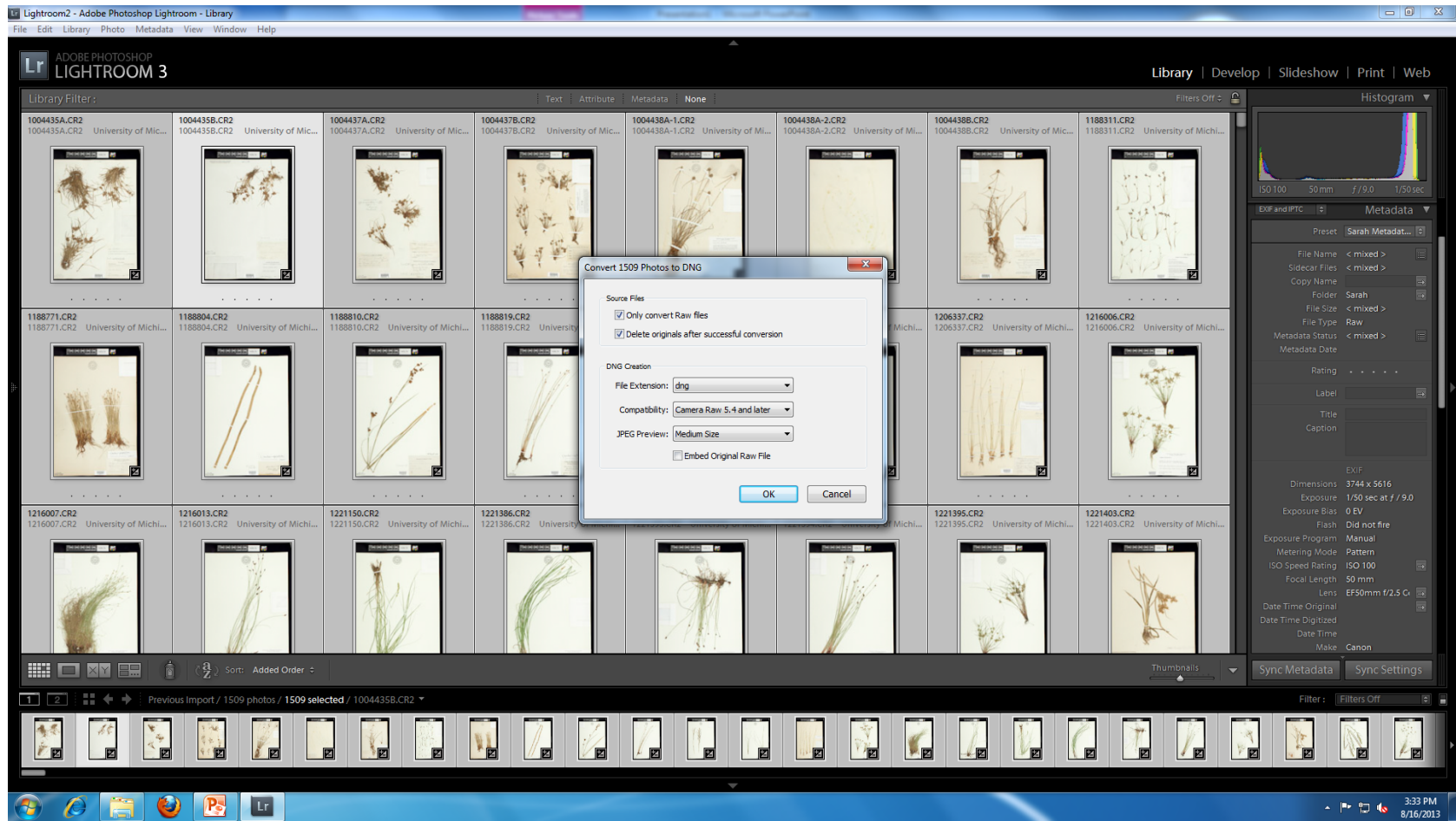
7 – from Photo menu, select “Save Metadata to File”



8 – Library Module, Library menu, select “Convert Photos to DNG”



Confirmation box before conversion begins



Progress of DNG conversion

Lightroom2 - Adobe Photoshop Lightroom - Library

File Edit Library Photo Metadata View Window Help

Converting 1509 photos to DNG
1188771.CR2

Library | Develop | Slideshow | Print | Web

Library Filter: Text Attribute Metadata: None Filters Off

1004435A.dng 1004435A.dng University of Mich...	1004435B.dng 1004435B.dng University of Mich...	1004437A.dng 1004437A.dng University of Mich...	1004437B.dng 1004437B.dng University of Mich...	1004438A-1.dng 1004438A-1.dng University of M...	1004438A-2.dng 1004438A-2.dng University of M...	1004438B.dng 1004438B.dng University of Mich...	1188311.dng 1188311.dng University of Michi...
1188771.CR2 1188771.CR2 University of Michi...	1188804.CR2 1188804.CR2 University of Michi...	1188810.CR2 1188810.CR2 University of Michi...	1188819.CR2 1188819.CR2 University of Michi...	1188820.CR2 1188820.CR2 University of Michi...	1201082.CR2 1201082.CR2 University of Michi...	1206337.CR2 1206337.CR2 University of Michi...	1216006.CR2 1216006.CR2 University of Michi...
1216007.CR2 1216007.CR2 University of Michi...	1216013.CR2 1216013.CR2 University of Michi...	1221150.CR2 1221150.CR2 University of Michi...	1221386.CR2 1221386.CR2 University of Michi...	1221393.CR2 1221393.CR2 University of Michi...	1221394.CR2 1221394.CR2 University of Michi...	1221395.CR2 1221395.CR2 University of Michi...	1221403.CR2 1221403.CR2 University of Michi...

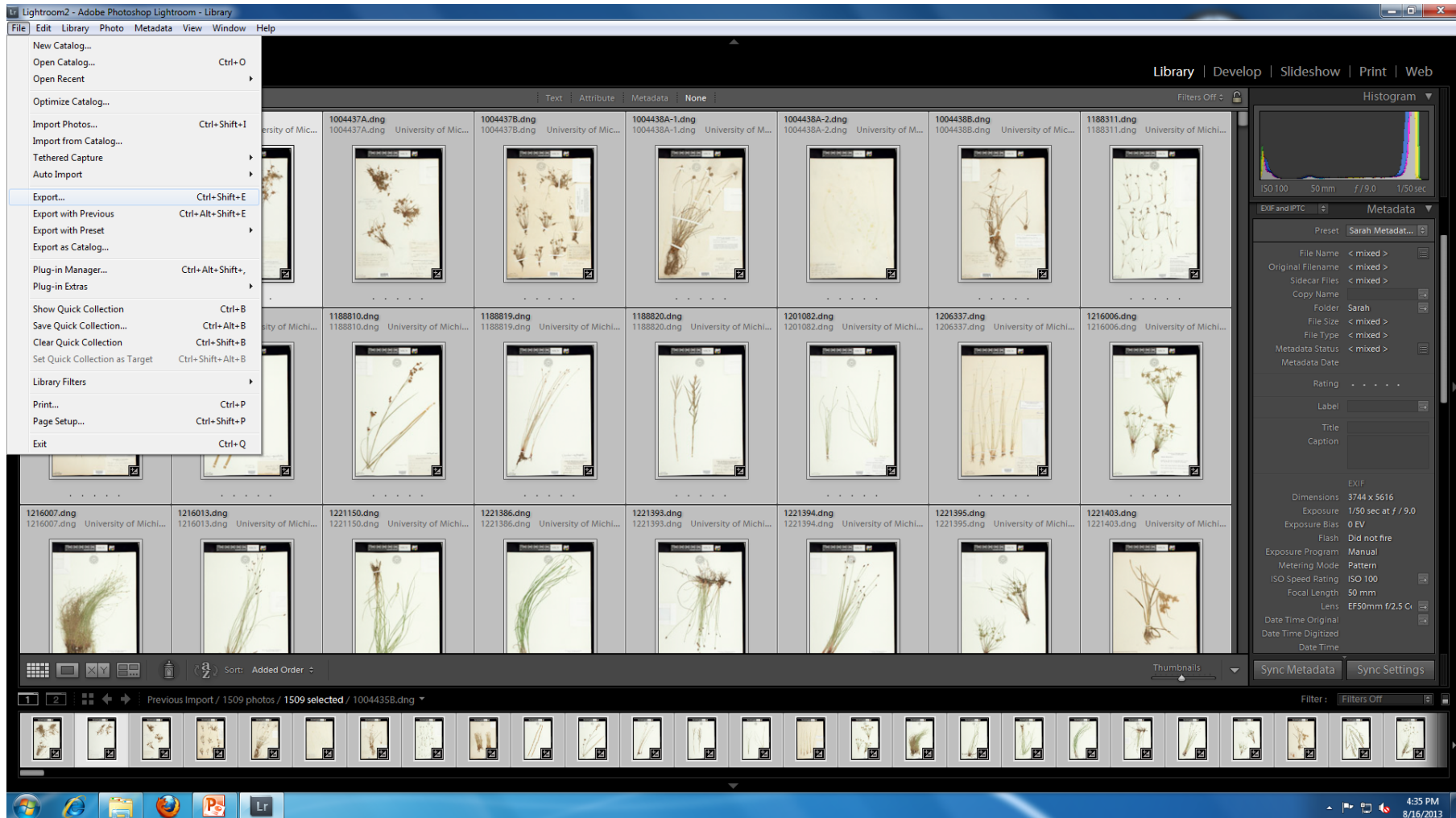
Sort: Added Order

1509 photos / 1509 selected / 1004435B.dng

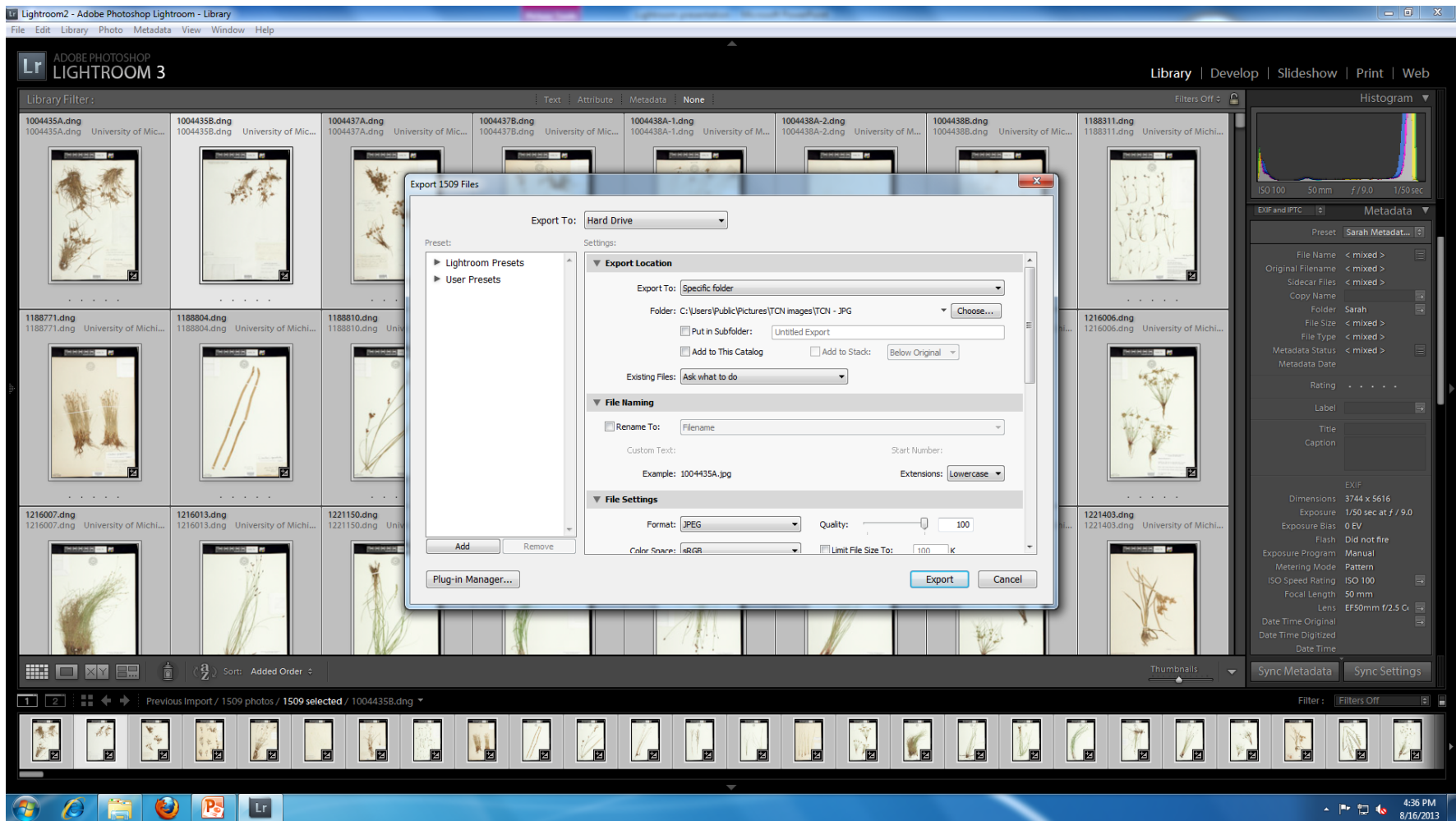
Filter: Filters Off

3:33 PM
8/16/2013

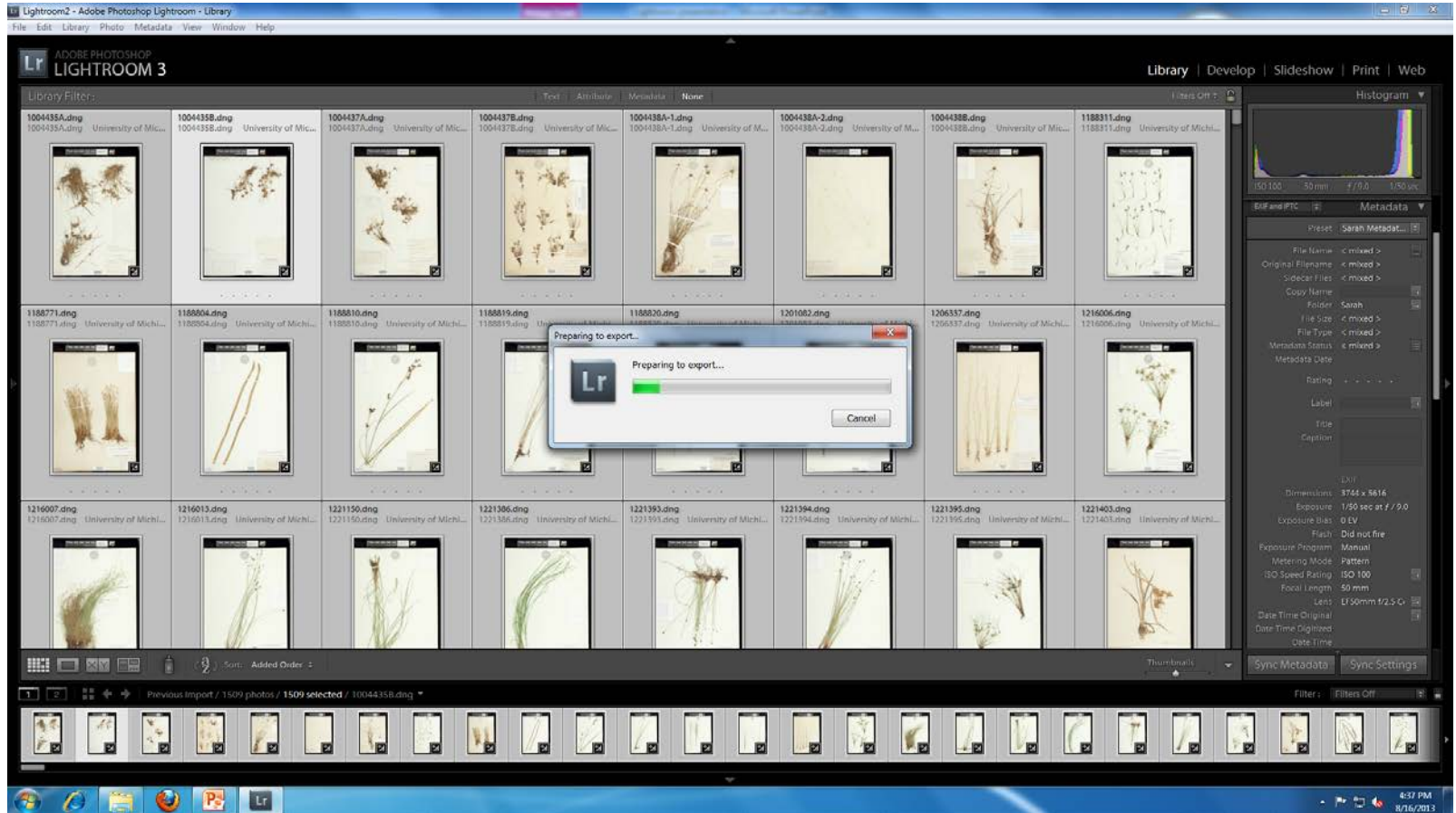
9 – from File menu, select “Export”



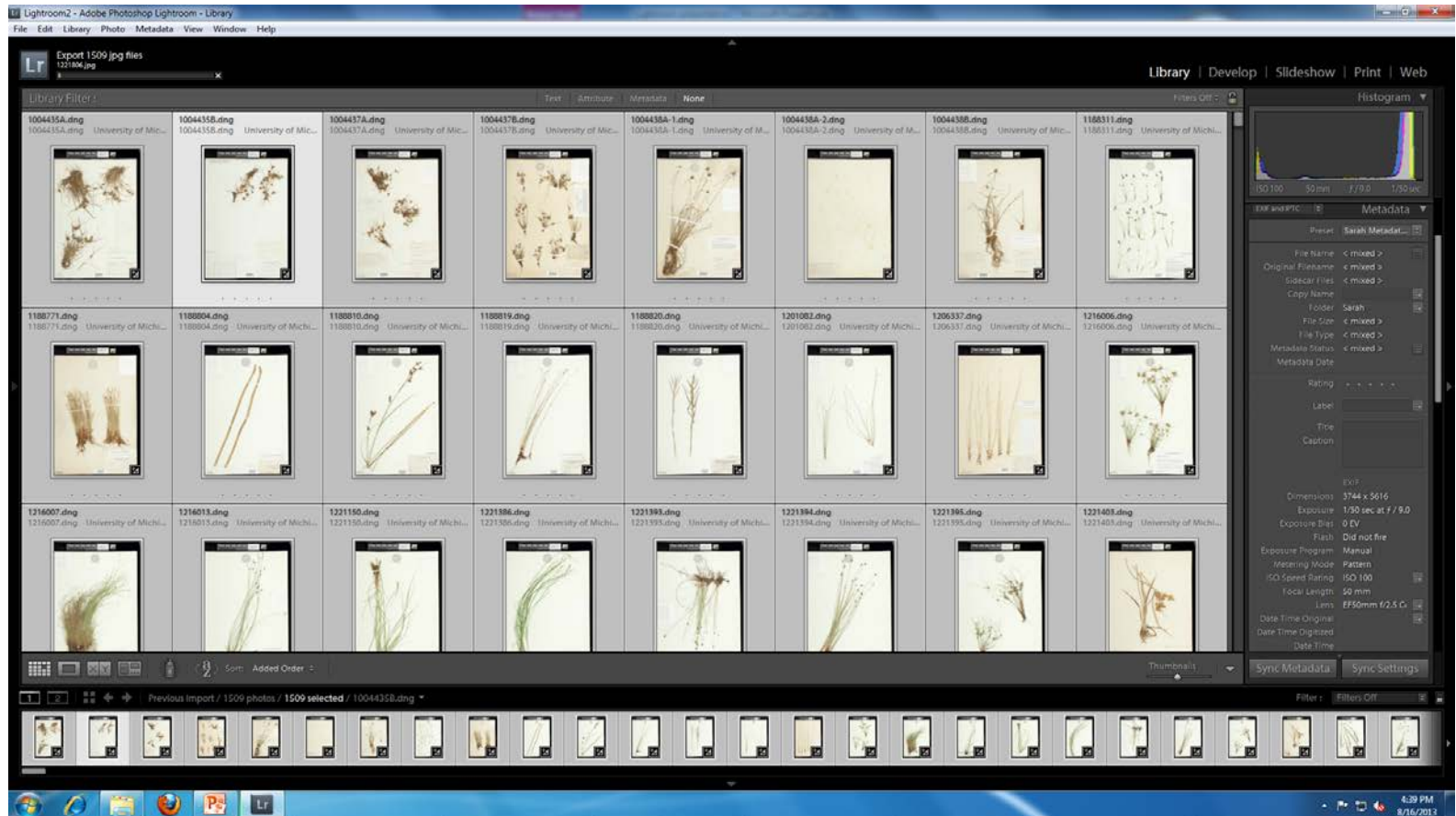
Check box to affirm settings



Confirmation of Export



Watching progress of Export



Post Lightroom tasks

- Check folders for any desired file size statistics
- Move both JPG and DNG files to available off-computer storage (network server, backup drives, etc).

Acknowledgements

- National Science Foundation:
 - grants to MICH (1115081), NY (1115104) for the TCN
- Student assistants at MICH