

Slide Scanning Procedure

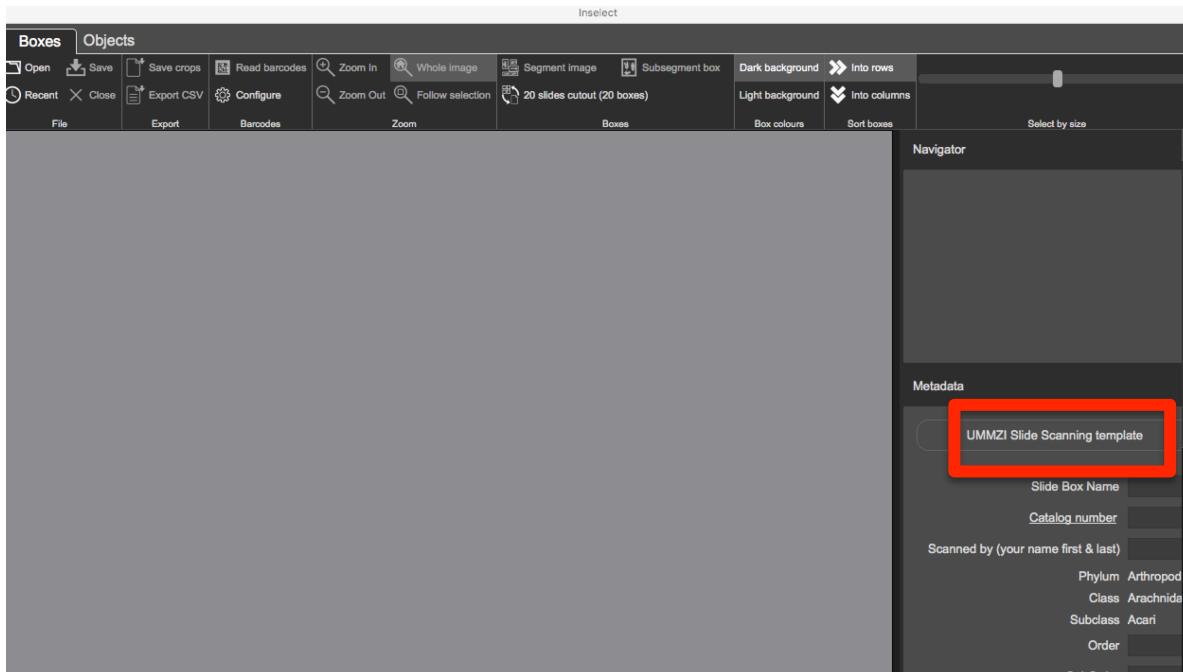
University of Michigan Museum of Zoology, Insect Collection (UMMZI)

Erika Tucker

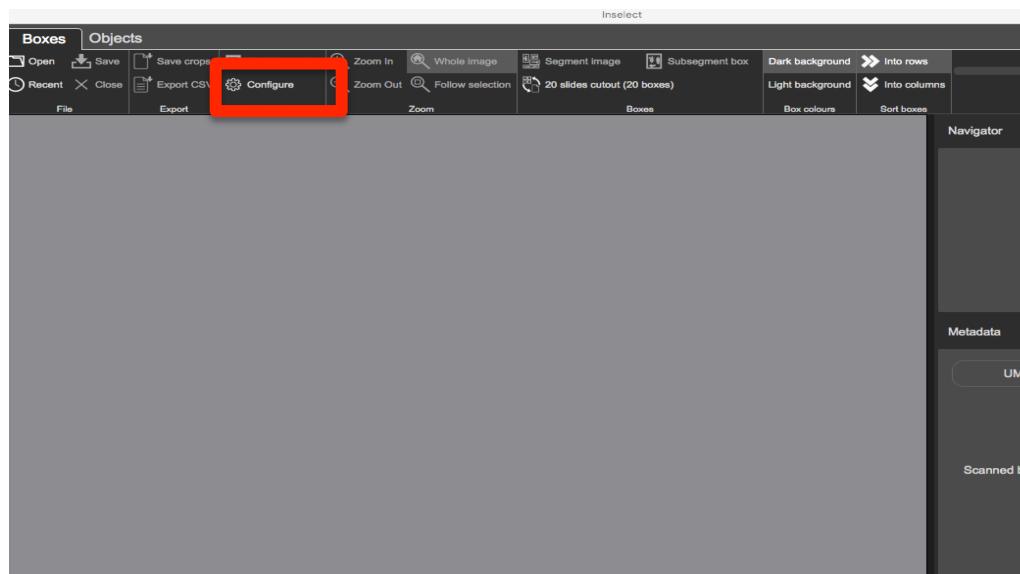
~ Updated Feb. 11, 2021 ~

- Open flatbed scanner and **make sure glass is clean!**
- Place clear slide holding rig on scanner, pegs up. **Make sure rig is clean!**
- Place slides (up to 20) face down on the slide holding rig
 - Remember what order you place them in so they can go back in the box the same way they came out)
- Make a folder somewhere you can find and label it with the taxonomic name of the slides you are working with (you may need to make multiple folders if there are multiple species in the same box/scanned image)
- Open scanner application (there should be a shortcut on the desktop)
- Tell the scanner where to save images to (save as jpg files)
- Close lid carefully – Remember these are glass slides!
- Preview and scan the slides on scanner
- Carefully put slides back in the box - IN THE SAME ORDER AS THEY WERE ORIGINALLY
- Open the Inselect application (you may want to create a shortcut on your desktop)
- Save a copy of the file "[20 slides cutout.inselect cookie cutter](#)" to the folder your scanned image is in. This file is located in the shared Google Drive folder *Parasite Tracker Project* and may have also been emailed to you.
- Save a copy of the "[UMMZI-slide-scanning.inselect template](#)" to the folder your scanned image is in. This file is located in the shared Google Drive folder *Parasite Tracker Project* and may have also been emailed to you.
- Load the UMMZI-slide-scanning template if it is not already loaded
 - It should say "UMMZI Slide Scanning Template", not "Darwin Core" or something else.
 - If it says "Darwin Core" or something else click the button and then navigate to where you downloaded the UMMZI template and select it.

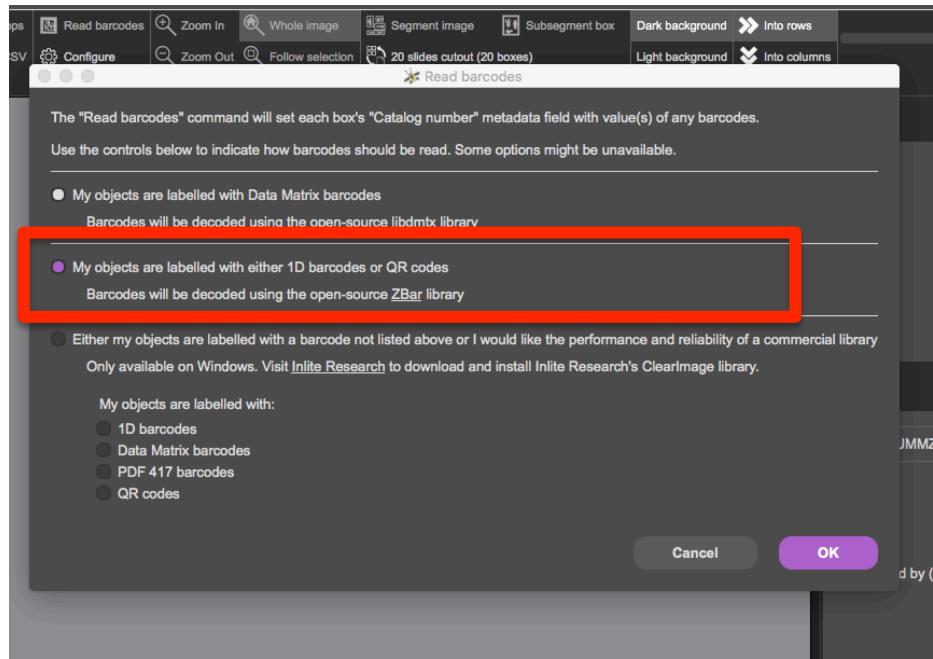




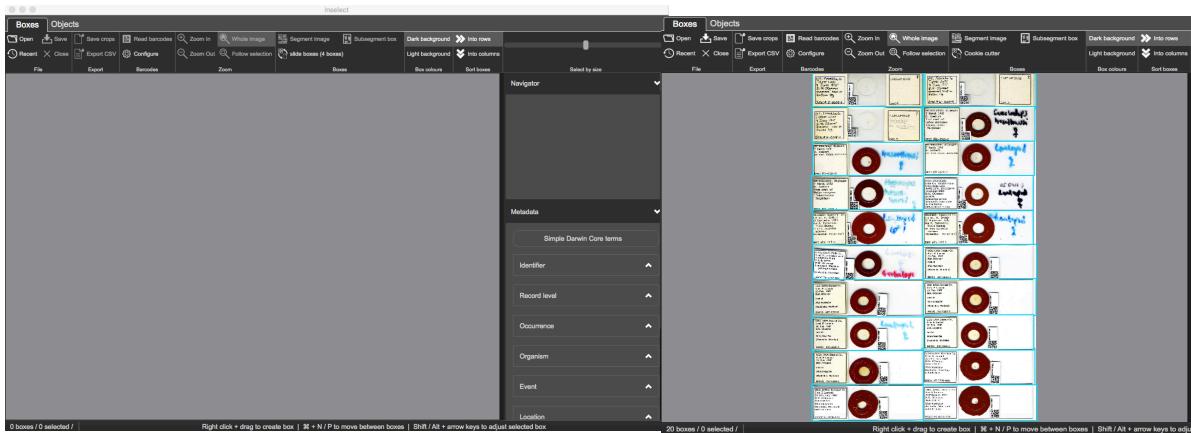
- **Configure the program to read QR codes.** You should only have to do this once per computer, but the program will not be able to read the QR code labels without this step.
 - Click the configure button in the top panel



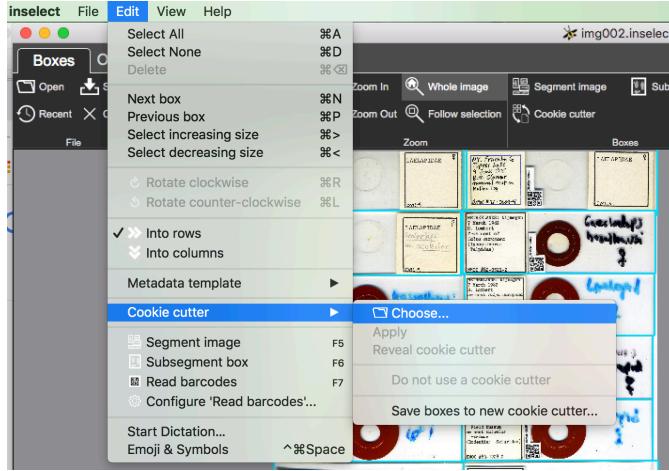
- Make sure the second option is selected “My objects are labeled with either 1D or **QR codes**”



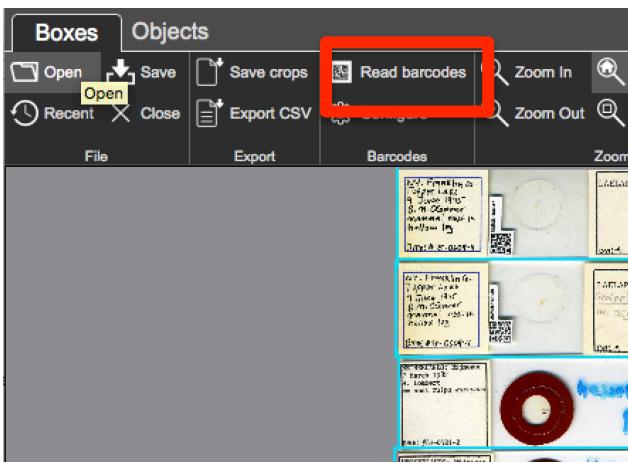
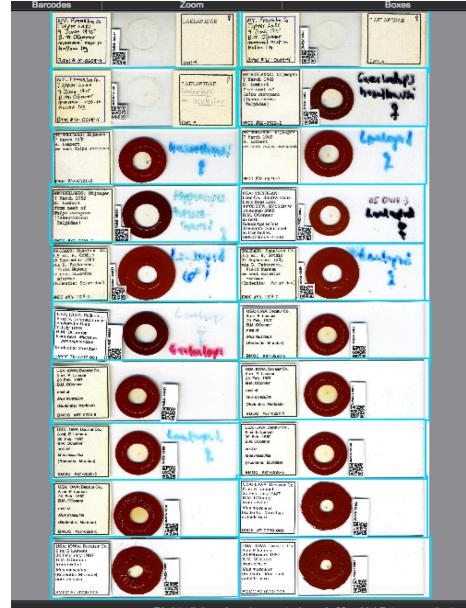
- Click ok
- Drag scanned image into Inselect



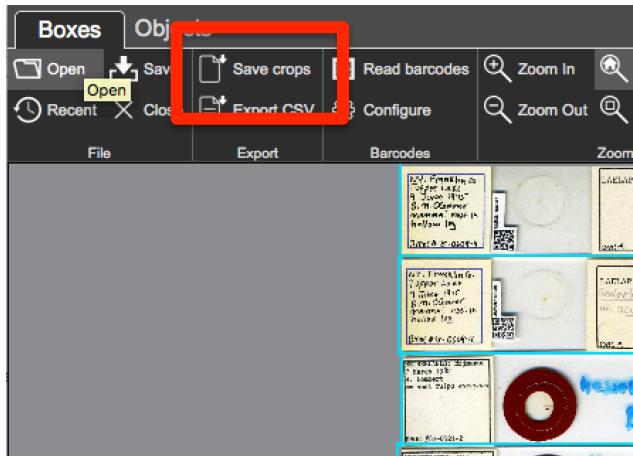
- Go to edit → Cookie Cutter → Choose → navigate to folder with your scan and the “20 slides cutout.inselect_cookie_cutter” file
- Select the “20 slides cutout.inselect_cookie_cutter” file and click open



- Your image should now have blue boxes around each slide
- Make sure the blue boxes catch everything in a slide – especially all of the barcode
- If the blue boxes don't line up or are too small for a slide just move them or hover over a corner and then drag when the arrow pops up to adjust the size
 - If you are frequently moving/resizing the boxes to the same places you can save a new cookie cutter for future slide scans.
 - Go to “Edit”→ “Cookie cutter” → “Save boxes to new cookie cutter”
 - Give it a new name and remember where you saved it
 - You can delete empty boxes (i.e., if you only need 18 boxes for 18 slides, delete 2 boxes)
- When all the blue boxes are in the right places, click “Read barcodes”



- All of the slides that read the barcodes should be highlighted in pink. They should now be relabeled as “UMMZI-####”.
- Click the “Objects” tab at the top of the program to check that all slides were relabeled with the barcode and cropped properly (i.e., nothing accidentally cut out or lost from the slides images)
 - If any of the slides didn’t get read and relabeled:
 - Select the slide image
 - Put the cursor in the box on the right side panel called “Catalog number”
 - Use the scan gun to scan the QR code on the image or physical slide that didn’t get read
 - Repeat as necessary
- When all the blue boxes are in the right places, click the “Save Crops” button on the top panel



- You should get a pop up that says 20 crops saved and there should now be 20 new images in the folder you were working in, each of a single slide (or the number of slide you were working with).
- Make sure all the “crops” or individual slide images are in the appropriately named taxonomic folder. This is needed to get the images into the correct taxonomic places in the database.
- Upload all individual slide images to the shared google drive folder “Slide Scans” (in the Parasite Tracker Project folder). You do not need upload the original multi slide image or random program generated files.
- Delete images from computer. **MAKE SURE THEY FINISHED UPLOADING FIRST!!** The computer does *not* automatically delete your files after logging off like some computers on main campus.
- When you finish scanning all the slides in a box put a green “Digitized” sticker on it (next to the orange “Databased” sticker if there is one).