SOP 23: Transcribing slides using the comprehensive collection object form in TaxonWorks

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Preamble

This standard operating procedure document (SOP) describes the process we use to extract data from images of slide-mounted specimens, using the comprehensive collection object form in Taxonworks.

Procedure

0. Log on to Taxonworks, select the Frost Museum project, and go to Tasks tab. Find the “Collection objects filter” task and add it to your favorites (click star icon to make it yellow). You only need to do this once

1. Click the “Collection objects filter” task, which will look like the screenshot below. Collection objects are things stored in the Museum collections, in our case specimens or lots (for example a vial filled with multiple specimens). You will use this form to filter the objects in the database to just those that need to be worked on by you.
2. You will see there are many ways to filter the objects in the database, for example by finding all those collected in Pennsylvania (“Geographic area”) or those of a particular species (“Determinations”). You will need to search by “Tag”, which is essentially a keyword. Scroll until you see the Tags box and select “search”:

![Tags](image)

3. Search for **TPT slide** (Harleen) or **Antonio TPT slide** (Antonio). They will show up when you start typing. Once the tag is selected scroll to the top of the page and click “Search” bar, which should now be activated (blue now instead of gray). You will see all the Collection objects that are assigned to that tag:

![TaxonWorks](image)

4. Clicking “Show” for one of the Collection objects, will open it in a new window. In that new window find the “Edit” link on the left:
5. You are now in the “Comprehensive specimen digitization” form, which is HUGE and has tons of options for entering data related to this object. Take a few minutes, scrolling up and down, to familiarize yourself with or remind yourself of the options.

6. In the lower left of the screen shot above you will find an option to zoom the image of the slide, which will end up as an overlay you can work from. See below:
7. Now let’s start putting pieces of data in their proper places! Note that some of these data will already be in the database. Below you will find examples of how to enter data for this example slide:

8. Catalog number. If it’s there already move on to the next step. If not see below:
9. Check that the Repository (select Frost Entomological Museum) and Preparation (Slide) sections are filled in. If yes, move on to the next step. If not see below.

10. Fill in the buffered labels next. For this example slide, they will look like this:

Strigiphilus oculatus (Rudow, 1870)  
Det. K. C. Emerson ’74

Ex- Nyctea nyctea (Adult snowy owl head)  
Killed by car  
Fairbanks, Alaska  
Nov. 8, 1973  
Mel Buchholtz, K. A. Neiland  
A. Fish & Game #3964
11. From here you can move to the “Object details” options. If it is clear from the slide that the specimen is an adult or nymph (often indicated as “N” on a slide label) or male or female you can add those details here. There is also a counter for how many specimens are on the slide:

Object details

<table>
<thead>
<tr>
<th>Total</th>
<th>Biocurations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life stage</td>
</tr>
<tr>
<td></td>
<td>Adult</td>
</tr>
<tr>
<td></td>
<td>Larva</td>
</tr>
<tr>
<td></td>
<td>nymph</td>
</tr>
<tr>
<td></td>
<td>Sex</td>
</tr>
<tr>
<td>1</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
</tbody>
</table>

Note: I selected “Adult” because I can tell that from the slide; you might not be able to, and that’s ok

12. Next we will add the determination data (basically which species of parasite it is, who determined that and when):

In this example the species is *Strigiphilus oculatus* (Rudow, 1870), which was made by K. C. Emerson in 1974. Searching the database of that OTU returns nothing, so we will need to create it. See below, but be sure to add it exactly as it’s written on the slide. In this example the full species name (*Strigiphilus oculatus*) plus the reference where the species was originally described (Rudow, 1870) are both there.
13. From here, assuming the slide has host data, you will skip down to the “Biological associations”, which will be a little bit more involved. For this example slide, we have a louse (*Strigiphilus oculatus* (Rudow, 1870)) that was collected from a snowy owl. You can add this info by selecting the property “associated with”
If the host name isn’t found when you search for that OTU you can add it by selecting the “new” button, just to the right of the search bar, then “create”. Add it exactly as it appears on the slide. For example, “poodle”, “beagle”, “dog”, “Canis familiaris” should each be entered as unique hosts.

14. You’re almost done! Scroll to the top of the page and click “Save”

15. All your work should be saved. Now let’s remove the tag so that this slide doesn’t show up again in future searches. Click the “CollectionObject annotator” button:

16. Select the “Tags” section and trash the existing tag that is the one assigned to you. In this case it’s “TPT slide”
17. In that same form assign a new tag => “TPT transcribed”. You can find this tag by selecting the "All" button. Now you can close this window and move to the next slide in your original list.