Game Camera Data Entry

Mammalogy 2019

Data Entry

- Data will be entered in two places: eMammal and Excel

- I recommend doing this all at the same time, but you don't have to

- There is a guide on how to use eMammal on Canvas; it's called "eMammal Webinar" under the Spring Creek data folder (starts at 6:00 and goes through 23:00)
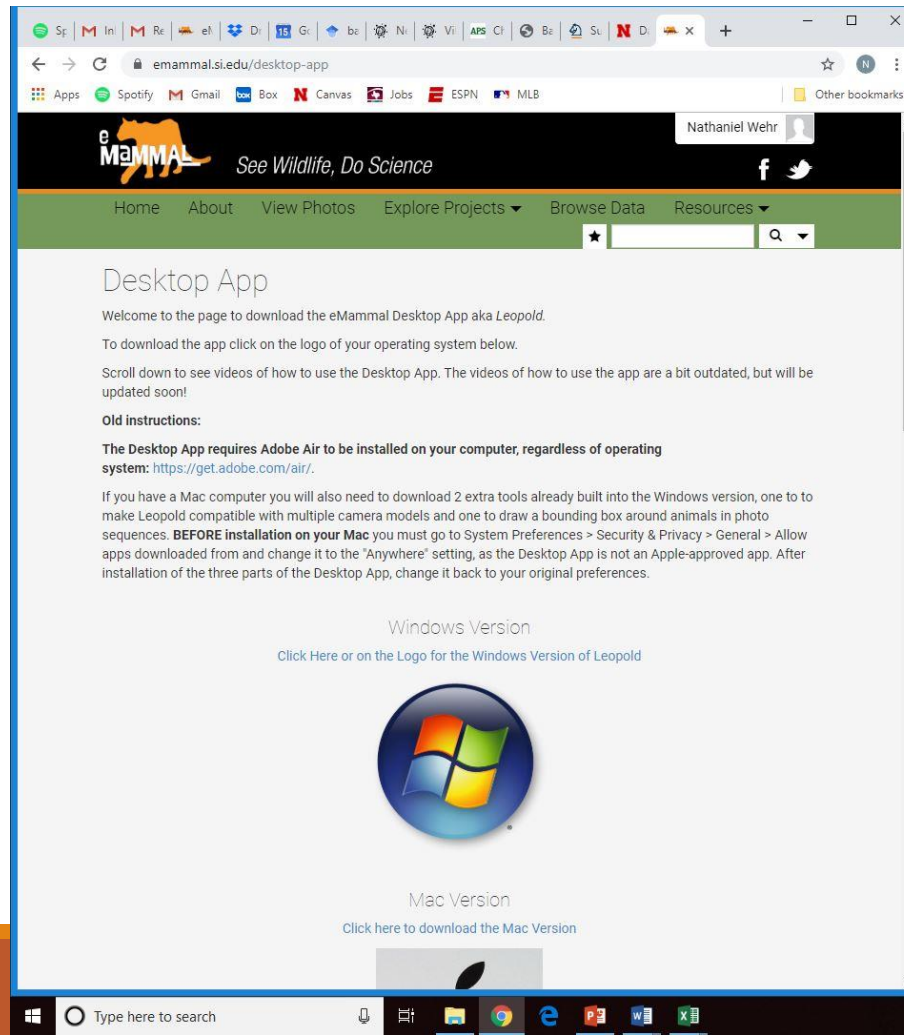
eMammal
Step 1 – Download the eMammal desktop app

- Go to < emammal.si.edu > and log in

- Username: nwehr

- Password: Mam476!

- Click the resources tab and then desktop app

- Click on either the Windows logo or Mac Logo to download the version for your computer

eMammal
Step 1 – Download the eMammal desktop app

eMammal
Step 2 – Upload photos to eMammal

- Open the eMammal desktop app

- Sign in using the same username and password

- Press load new photos

- Project = "p270 – Snapshot USA – 2019"

- Subproject = "sp1621 – NE_Grassland_Lincoln"

- Deployment ="NE_Grassland_Lincoln_#" (*Your # is the number of the game camera, so SC7 = #7)

- Choose Folder: choose the folder I give you; open the folder (it should look empty), the press select folder)

- It should say Found ### images beside load photos, that means it worked

eMammal
Step 2 – Upload photos to eMammal

eMammal
Step 3 – Enter metadata

- The metadata can be found under the data analysis folder on Canvas

- All the info is in the first 5 columns of the excel file

eMammal
Step 4 – Identify Species in Images

- Pictures within 1 minute of each other are considered a single sequence

- Look for movement within a sequence to identify species

- Record all species (including birds, reptiles, etc.) in a picture and how many of each species

- If you can tell the sex (like a buck with antlers) you can specify sex

- On the right side of the desktop app, there is an Add Species tab
  - The codes for most species are just their common names
  - "human non staff" is the code for humans besides us
  - "camera trapper" is one of us (mostly me)
  - "unknown animal" is if you can't identify the species
  - "vehicle" if you get a tractor/car/bicycle/etc.
  - "misfire" if a sequence has no animals in it

eMammal
Step 4 – Identify Species in Images

eMammal
Step 4 – Identify Species in Images

SOME KEYBOARD SHORTCUTS TO REMEMBER

- LEFT or RIGHT ARROWS: moves between images within your currently selected sequence

- SHIFT + LEFT/RIGHT ARROWS: moves between sequences

- UP or DOWN ARROWS: select species from list

- ENTER: identify sequence with selected species

- A-Z: edit species filter text

- CONTROL (COMMAND) + SPACE: clears the filter text
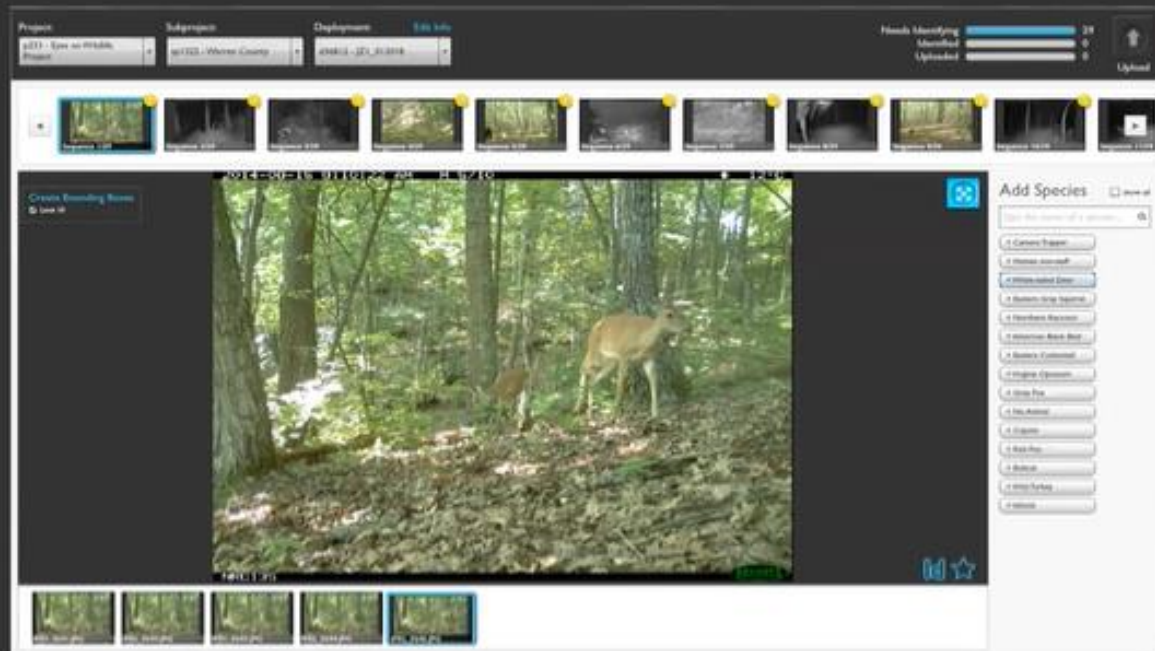
eMammal
Step 5 – Upload

- Once all your sequences are done and you've identified the species, you are done. You just click upload

- If you only get through half of your sequences and you need a break, you can click upload and come back later

- It won't upload the same sequence twice

- I'll be able to log on after you're done and see if you've done all your sequences or not

Excel
Step 1 – Fill out on Excel

- You need to add the data to an Excel file for our class to use

- The excel file is in the Spring Creek Data folder and is titled "Spring Creek Data"

- When you open it, you need to enter the data for each sequence into the excel sheet

Excel
Step 1 – Fill out on Excel

- **IMPORTANT:**
  - Delete the sample info that I put in the excel sheet before you enter yours
  - If there's more than one individual of the same species you have to enter that data into excel twice (or you can just copy the row and paste it below the first row)
  - You don't count it as a new appearance of the species unless it occurs at least 30 mins after the first appearance
  - You have to use military time for the data to work in R
  - The date, time, and temperature are in the bar across the bottom of the picture

Excel
Step 1 – Fill out on Excel

- **Species**
  - You have to type the species name in on Excel exactly as it is spelled on the list of species at Spring Creek Prairie (otherwise, R, will reject it)

	Camera	Date	Time	Temp	Species
1	Camera	Date	Time	Temp	Species
2	SC1	9-25	2:50:00	78	Human
3	SC1	9-26	6:43:00	48	Raccoon
4	SC1	9-27	9:56:00	69	Human
5	SC1	9-27	11:29:00	69	Human
6	SC1	9-27	13:41:00	73	Human
7	SC1	9-27	13:41:00	73	Human
8	SC1	9-27	15:08:00	77	Fox Squirrel
9	SC1	9-27	16:16:00	75	Human
10	SC1	9-27	19:36:00	68	Human
11	SC1	9-27	19:54:00	68	Human
12	SC1	9-28	4:23:00	55	Raccoon
13	SC1	9-28	7:35:00	51	Fox Squirrel
14	SC1	9-28	11:18:00	57	Human
15	SC1	9-28	13:33:00	66	Human
16	SC1	9-28	13:37:00	66	Human
17	SC1	9-28	13:37:00	66	Human
18	SC1	9-29	12:00:00	71	Human
19	SC1	9-29	14:11:00	71	Human
20	SC1	9-29	14:19:00	71	Human
21	SC1	9-29	14:19:00	71	Human
22	SC1	9-29	16:05:00	73	Human
23	SC1	9-30	5:43:00	77	Raccoon
24	SC1	9-30	11:57:00	82	Human
25	SC1	10-2	9:09:00	51	Fox Squirrel
26	SC1	10-2	11:00:00	51	Fox Squirrel
27	SC1	10-2	17:51:00	53	Human
28	SC1	10-2	17:51:00	53	Human
29	SC1	10-3	14:25:00	57	Fox Squirrel
30	SC1	10-4	7:03:00	44	Eastern Cottontail Rabbit
31	SC1	10-4	14:58:00	55	Human
32	SC1	10-4	15:36:00	53	Human
33	SC1	10-4	15:36:00	53	Human
34	SC1	10-5	12:01:00	62	Whitetail Deer
35	SC1	10-5	15:13:00	77	Human
36	SC1	10-5	15:14:00	77	Human
37	SC1	10-5	15:37:00	75	Human
38	SC1	10-5	16:48:00	69	Human
39	SC1	10-5	16:48:00	69	Human
40	SC1	10-6	2:26:00	42	Raccoon
41	SC1	10-6	3:39:00	42	Raccoon
42	SC1	10-6	8:58:00	46	Human

Excel
Step 2 – Upload to Canvas

- To submit your Excel file for your homework, you can do so on Canvas; I created an assignment called data entry where you can upload your file

Everyone

- Both Ed Hubbs (director of Spring Creek Prairie) and Roland Kays (in charge of eMammal) have asked us to set aside come cool pictures so they can show people

- So, I want everyone to pick their favorite picture from their set of pictures

- You can then upload it to the discussion I created on Canvas so that you can all see the best photos
  - Click "Reply" under the discussion at the top, write your camera and species, and attach the picture file (I posted a few examples already)

Cool Pictures from Spring Creek

MOULTRIE ○ 33°F 1639 12216- 11 OCT 2019 04:25 am

Cool Pictures from Spring Creek

MOULTRIE   50°F   1423 123232   02 OCT 2019 10:47 pm

Cool Pictures from Spring Creek

MOULTRIE 63°F ☾ 09 / 24 / 2019 10 : 37PM 939