WOODLAND PARK ZOO

WOODLAND PARK ZOO SAVES ANIMALS AND THEIR HABITATS THROUGH CONSERVATION LEADERSHIP AND ENGAGING EXPERIENCES, INSPIRING PEOPLE TO LEARN, CARE AND ACT.

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Wild Wise: Coexisting with Carnivores Camera Trapping Guide for Students and Families



Remote camera traps are cameras that can be set up to automatically take photographs when they sense motion and/or heat and are often used for monitoring wildlife. Wildlife researchers use remote camera traps as a noninvasive method to help collect data to answer research questions about wildlife.





Camera Kit



- You should have received from your teacher at least one set of the following items:
 - remote camera trap with manual
 - AA batteries (8 batteries per camera)
 - 16GB SD/SDHC memory cards (2 cards per camera)
 - python cable lock and key (1 per camera)
 - small lock for camera case and key (1 per camera)

Every item should be labeled. Check that your kit is complete when you begin and upon return.







You should also have several copies of the Camera Trap Data Sheet to use when setting up and retrieving the camera.

Contact your teacher if you need copies of the Data Sheet.



CAMERA SETUP CHECKLIST

- Secure camera tightly on tree or other structure between knee and waist height
- □ Input camera settings, check that the Date/Time are correct, record this on the data sheet
- □ Check that batteries are sufficient (at least 50%) by looking at battery symbol on set-up screen
- □ Clear vegetation or other obstructions from camera view
- □ Make sure the camera is pointing parallel with the ground use sticks to change the angle if necessary
- Measure the distance from the camera to the "target" (a trail, a trash can, or other central point) – record this on the data sheet
- Arm the camera (move from SETUP to ON), close and lock it securely

RECOMMENDED CAMERA SETTINGS: Mode: Camera Image size: 8M Pixel Image format: Full Screen Capture number: 3 photos LED Control: Medium Camera name: skip Video Size: skip Video Length: skip Interval: 3S (seconds) Sensor Level: normal NV Shutter: Low Camera Mode: 24hrs Time stamp: on Set Clock: current time (24hr-format) and current date (Y/M/D) Field Scan: Off Coordinate Input: off (may input latitude and longitude, see manual) Video sound: On

Default Set: Cancel

WILD WISE: COEXISTING WITH CARNIVORES

Please fill in all sections when you set up a camera or collect

CAMERA TRAP DATA SHEET

photos from a camera

DATASHEET

RESEARCH TEAM INFORMATION

SCHOOL NAME: ____

TEACHER LAST NAME:

CLASS PERIOD:

STUDENT FIRST NAME(S): ______

CLASS RESEARCH QUESTION:



Review these videos, taking notes that will help you when you're setting up a camera:

- Getting to know your camera trap: <u>https://www.youtube.com/watch?v=dRDyMm5eJe4&feature</u> <u>=youtu.be</u>
- How to use a Bushnell camera:

https://www.youtube.com/watch?v=Wym81bsy5Bc

- Your exact model might differ, but the basic functions will be similar.
 Consult your camera manual as you follow along with this video.
- See recommended Bushnell camera settings on slide 10.
- Camera setup by eMammal: <u>https://www.youtube.com/watch?v=aW3XGjq3I7A</u>



Bring your notes from reviewing the "how to" videos and your Data Sheet with you. During the installation, fill out your Data Sheet completely and neatly.

You might also print or have this PowerPoint accessible.





Push button to SETUP and use Menu to input settings:

- Mode: Camera
- Image size: 8M Pixel
- Image format: Full Screen
- Capture number: 3 photos
- LED Control: Medium
- Camera name: skip
- Video Size: skip
- Video Length: skip
- Interval: 3S (seconds)
- Sensor Level: normal
- NV Shutter: Low
- Camera Mode: 24hrs
- Time stamp: on
- Set Clock: current time (24hr-format) and current date (Y/M/D)
- Field Scan: Off
- **Coordinate Input:** off (may input latitude and longitude, see manual)
- Video sound: On
- Default Set: Cancel



Securing your Camera







You may use both the included strap and the cable lock to ensure your camera is secure on the tree. Note that the cable lock feeds in through the wider "back" of the cable lock and out through the narrow "front" of the cable lock (like the tongue of a python, hence the name "python lock"!)

After your camera has been setup for a few days, visit the camera and review the photos (if any) to ensure that your camera location and setup will result in good quality camera trap images. (Consult your camera manual for instructions on how to review the photos.)

A few things to check:

- Make sure your camera is taking **still images** and not video.
- See if there are any tree branches, other vegetation or people/car traffic that are causing many "false triggers".
- Ensure the images are level not tilted like this!



Then, after double checking the camera settings are on the recommended settings (including **correct date and time**), set your camera to ON, lock the camera housing lock and the cable lock, and leave your camera running, ideally for at least **three weeks**.



Bring a blank copy of the **Camera Trap Data Sheet** with you and fill it out completely and neatly.

To retrieve the camera and photos, first walk in front of the camera to capture an "end of deployment" photo.

Unlock the cable lock and camera housing, note the number of photos (record on the data sheet), and turn camera to OFF. Take all equipment with you.

You can either retrieve the memory card and put it in a safe place to bring back to the classroom, or leave it in the camera. Return all equipment to your teacher, including the memory card.

eMammal



eMammal (<u>https://emammal.si.edu/about</u>) is a software and web-based tool used by researchers across the globe for organizing and archiving wildlife camera trap data and sharing results with each other and the public. These data help address important questions related to wildlife conservation.





Your teacher will work with Woodland Park Zoo staff to get your photos uploaded to the Wild Wise: Coexisting with Carnivores eMammal project.

This makes your photos part of a conservation research database! Much of this data is available for the public to download and use to answer important wildlife conservation questions! See https://emammal.si.edu/analysis/data-

download



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Species photographed



Thank you and best of luck with your camera trapping!