



Introduction to FotoFauna — Quick Reference Guide

Select a Trail Camera

Traditional trail cameras can be placed anywhere and take excellent quality images during the day and at night. They typically require AA batteries, standard SD cards, and a mounting strap or bracket. Some come with security cases and locks to deter theft and reduce mayhem by black bears:

- **Meidase P40 (Amazon \$56)** – Requires 8 x AA batteries, SD card <32 GB, very sensitive, recommend turning off side sensors, nighttime image quality adequate but not great, it can record both videos and photos at the same time but does not have security box.
- **Browning Strikeforce HD Pro X (TrailCamPro.com \$159)** – Requires 6 x AA batteries, SD card <128 GB, great image quality, it cannot record both videos and photos at the same time (must select one or the other) but can purchase Browning security box and solar panel to go with camera. Incredible battery life for camera with only 6 batteries.

Alternatively, home security cameras can record continuously and require less maintenance. They often plug right into an outdoor outlet and send videos over your home WiFi to your phone. You may need to purchase an online video storage account and the images are not as high quality as a traditional trail camera:

- **Google Nest Cam Outdoor (Amazon \$200)** — Records continuously and send notification if it detects motion to a mobile phone. It is calibrated for human detection so does not send notifications for many smaller animals. The camera angle is wider than most trail cameras. Because this camera records only video, you will need to take a screenshot of the animal detections in order to submit a photograph with your FotoFauna checklist.

Install the Camera

- **Location**—Find a good location to install your camera that has a clear view of a place of likely animal activity (e.g. wash or game trail, animal burrow, water).
- **Mounting Structure** – Use the camera’s strap to tightly mount the camera to a tree, fencepost, or other found object (e.g. rock, cinderblock, tpost in bucket filled with gravel) that is stable. If mounting on tposts, special mounts available on amazon (“T-Mate” \$33).
- **Height**—Place camera at a height of 12 – 18” above the ground. If you need to mount higher, be sure to angle the camera down so that the lens is pointed towards the ground. A laser pointer may assist you while setting the camera to ensure the angle is correct. To keep the camera mounted at the desired angle, you may need to improvise a shim behind the camera to keep it angling towards the ground.



- **Avoid Facing East and West**—Avoid facing camera due east and west to prevent the low sun angles from interfering with image quality.
- **Avoid Waving Vegetation**—Tall grass or long branches within a few feet of the camera will move in the wind and trigger the camera to record when no animals are present. Use this as a criterion when selecting a camera location.
- **Record Camera Location**—Determine the camera’s specific location using a GPS or mobile phone (you’ll need this for your FotoFauna Checklist). Use Google Maps on a mobile phone while standing at your camera and press the current location blue dot for 1-2 seconds until a red pin appears. Scroll down to look at the information listed about the dropped pin and record the latitude and longitude in decimal degrees (e.g. 32.26404, -110.94825).
- **Set Camera**—Make sure your camera is set up to document wildlife under the camera’s setting menu:
 - Enter in the correct date and time.
 - Give your camera a name that make sense to you (e.g. Wash1) and you can submit this name with your monthly checklist.
 - Select video or photos
 - Set capture delay – you may wish to increase this if you get too many false triggers
 - Select fast motion or long -range detection based on the habitat area your camera is facing
 - Be sure the camera is on before you set it and walk away!
- **Check Camera**—Check camera every few days at first to troubleshoot, then monthly once installation is finalized to swap memory cards and replace batteries.

Mammal Identification



It takes a lot of practice to get to know the different mammals of the region that will show up on camera. Many trail camera photographs show only part of the animal so it helps to learn how to identify species with a range of physical traits. A few general tips:

- **Find a field of reference**—Use the landscape as a reference to help gauge animal size (e.g. use a rock of known size in the camera view). You can also refer to other known



species on photographs from the same camera to help figure out how big your unknown animal is.

- **Learn your likely local species**—Not all species on the FotoFauna checklist may occur in your area. Consider your elevation, vegetation, and what other people near you have observed when determining potential species identifications (e.g. check the [FotoFauna Dashboard](#) or iNaturalist.org).
- **Organize your photographs**—There is no single right way to organize your photographs, however you will need to save the best photograph of each species observed on your camera each month to submit with your checklist. We recommend keeping the submission photos in its own folder labeled with camera name, month, and year.

Watch this tutorial on mammals that are tricky to distinguish:

<https://youtu.be/blMP7SYTZkY>

Use this guide as you review your photographs:

<https://skyislandalliance.org/wp-content/uploads/2021/04/SIA-Wildlife-Photo-ID-V.1.pdf>

FotoFauna Checklist

After the end of the calendar month, collect your species photos into an easy-to-reference folder on your computer and complete your checklist online [here](#):

Contact Information

- Name
- Email
- Phone number (optional)
- Language preference (English or Spanish)

Camera Information

- Camera ID (the name you give your camera)
- Month/Year of checklist (e.g. August 2022)
- Did you monitor for the entire month? (Yes or No; If No then enter the dates the camera was operational and the reason, e.g. batteries died on the 21st of the month)
- Are your photographs from a single wildlife camera?
- Was your camera in one location for the entire month?
- Latitude, longitude of camera (decimal degrees)
- Was there water for animals to drink within 50 feet of the camera during at least part of the month?



- How often do you detect people, domestic cats or dogs, livestock, or vehicles on your camera (never, a few days a month, most days of the month)

Species Presence/Absence

- Coyotes and Foxes:
 - Coyote
 - Gray Fox
 - Kit Fox
- Cats:
 - Bobcat
 - Jaguar
 - Mountain lion
 - Ocelot
- Hooved Mammals:
 - Bighorn sheep
 - Elk
 - Javelina
 - Mule deer
 - Pronghorn
 - White-tailed deer
- Skunks:
 - Hog-nosed skunk
 - Hooded skunk
 - Striped skunk
 - Western spotted skunk
- Raccoon family:
 - Raccoon
 - Ringtail
 - White-nosed coati
- Hares and Rabbits:
 - Antelope jackrabbit
 - Black-tailed jackrabbit
 - Cottontails (both eastern and desert)
- Badger family:
 - American badger
 - Long-tailed weasel
- Opossum
- Black bear
- Rodent family:
 - Abert's squirrel



- Arizona gray squirrel
 - Cliff chipmunk
 - Harris's antelope ground squirrel
 - Rock squirrel
 - Round-tailed Squirrel
 - Beaver
 - North American porcupine
 - Additional species (optional)
- Bat species
- Birds:
 - Cooper's hawk
 - Gambel's quail
 - Gould's turkey
 - Gray hawk
 - Greater roadrunner
 - Turkey vulture
 - Additional species (optional)
- Reptiles:
 - Gila monster
 - Additional species (optional)
- Additional non-checklist species (optional)
- Additional extra wildlife photographs (optional)

Permission to use photographs in FotoFauna communications

Space for additional notes on Checklist

Other Important Notes

A checklist should only contain photographs from a single wildlife camera that stays stationary for the full month.

If you move a camera that you've previously used for FotoFauna checklist, please give the camera a new name and collect updated GPS coordinates for its location. Otherwise, we may attribute changes in species composition to changes in the environment, when in reality, the camera is just in a new location!

Please only submit trail camera photographs to FotoFauna. For other wildlife sightings, please report to [iNaturalist.org](https://www.inaturalist.org).



Providing your permission for Sky Island Alliance to use your photographs in communications makes your submissions eligible for our annual photo contest. We will always provide photo credit and will not identify where your camera is.

Quarterly, your new checklist data will appear on the FotoFauna Dashboard. The locations shown on this public map are randomized to within 0.6 miles of the true camera location to protect wildlife and your camera.

Questions? Eamon Harrity by email eamon@skyislandalliance.org