CAMERA TRAPPING 101

A quick guide for prospective camera trappers

Camera traps – digital cameras containing an infrared sensor that is triggered by motion and heat – are becoming more and more popular. Wildlife enthusiasts, researchers, game rangers, farmers and even anti-poaching units all make use of this very effective and unobtrusive method to see what animals (and people!) are doing when they're not there.

All you need to start is a remote-sensing camera, a good location, a lot of patience and a little bit of good luck! Just follow these five simple steps to start taking great camera trap pictures.

1. What camera should I use?

There are a multitude of different models available on the market – some with white flashes, some with black or infra-red flashes and some that can take short video clips. Do some research to make sure the camera you obtain is best suited for your particular purpose. In our experience, the simplest camera is often the best. For instance, many infrared and black flash models are very sensitive and give fantastic day-time pictures, but they produce less desirable night-time shots because the images are black&white and often very grainy and blurry. If you want good, clear day- and night-time pictures, especially if you want to individually identify animals such as leopards, consider a camera with a white strobe flash (see photo examples below). Ideally, a camera trap must have a very fast trigger speed ("wake-up time") so that there is no delay in taking the photo once the camera is triggered, as well as a fast shutter speed, in order to freeze the action and ensure a crisp, clear photo. Rather invest a little more money in a camera that has these specifications – there is nothing more frustrating than downloading the images and only getting a bunch of tail tips and blurred images! The Cape Leopard Trust uses **Cuddeback** and **Spartan** models with a white strobe flash and 0.4 second trigger time.

2. Where should I place my camera?

Choosing the ideal location to place your camera is equally important. Many animals like to make use of hiking trails and jeep tracks, so these are always good options. Game paths, watering holes, bird baths, feeding/watering troughs and game kill sites are also popular places. Scout the area for animal activity to help you find a spot. Signs like spoor/tracks or scat/droppings is a good indication of animal presence. Scratch marks on trees, rubbing posts, drinking holes etc, will also maximise your chances of getting an interesting picture. Also look at the landscape – often geological features or dense vegetation channels the movement of animals, and these are ideal spots to consider. Decide which animals you want to photograph, read up on their habitat and habits, and select a location where you are most likely to capture good photographs.

3. How do I set up my camera?

The height at which you put the cameras depends a lot on the size and behaviour of the animal you're trying to photograph. However, having the camera at about 2-3 meters from the centre of the path/road and about 20-30cm high from the ground level, works very well for small to medium-sized animals such as mongoose, small antelope, porcupine, genet, honey badger, caracal and leopard. It is always good to walk (or crawl!) past the camera and take a reference picture to check that the height and distance are good.

Depending on your specific requirements, it is generally better to mount the camera at a right angle to the path. In this way you can obtain a clear photo of the flank of an animal (instead of head, tail or back shots), which is particularly handy for identification purposes. Most cameras have a strap with which it can be attached to a tree. However, if there are no trees where you'd like to put your camera, just hit a sturdy pole into the ground at the desired spot. Fence poles also work well. Securing the camera to the tree or pole with a few cable ties to prevent it from being tilted sideways is advisable – especially if there are baboons around!

If you are setting up a double station, make sure that the cameras are not directly opposite each other – the flashes will interfere and cause white-outs. Place the one camera a meter or more away from the opposite one, as per the image below. Make sure that you set the time and date on the camera correctly so that the subsequent photos have an accurate date and time stamp on them. This is especially important when setting a double station – make sure the camera times are 100% synchronised.

4. Things to keep in mind

- Always consider the direction of the rising/setting sun. If the camera points directly towards the sun, pictures are often overexposed. Some cameras are quite sensitive and the heat of the rays could even trigger it to take pictures.
- Most modern cameras are fully waterproof but beware of rising water levels near streams and dams! The cameras are not designed to be submerged.
- Many cameras have custom metal housings for protection against larger animals rubbing against it or taking an inquisitive bite to inspect it...

- The cameras are triggered by motion, so vegetation moving in front of the lens will trigger it unnecessarily – clearing the area in front of the camera is important.
- Placing the camera across from a big boulder (as in photograph below) can also help except if the boulder gets full sun for most of the day – if there is not a big enough temperature differential between the animal walking past the boulder and the boulder itself, the camera may not be triggered.

- Be creative! Pictures with an interesting or scenic background are nice to look at. Placing a camera at a stream may get you photos of animals jumping over it or reflections in the water when the animals come to drink, etc.

5. Downloading and reviewing photos

Although one is naturally very excited and inquisitive about what the cameras have captured, it is best to leave them undisturbed in the field for at least a few weeks. Depending on the amount of animal activity and the particular target animals, it might be necessary to leave the cameras out at a single spot for a couple of months. In some areas, for instance, it has taken us over four months to get a single leopard photograph. Patience is key! Most modern cameras use AA batteries. With good quality, long-lasting batteries, most cameras can operate for at least 3-4 months, often much longer if using lithium-ion. Once you start downloading photos from the memory cards, it is advisable to get an image management system in place – organise your photos in folders by location and date so that you can easily refer back to them.

Questions & ordering

For further specific questions about the models we recommend for leopard monitoring, email us on clt@capeleopard.org.za

We order our camera traps from a local supplier called Camera Traps CC. The owner, Chris, is very knowledgeable and helpful – he can also give advice regarding the specific makes and models that will suit your particular use-case. Contact him on chris@cameratraps.co.za and tell him that the Cape Leopard Trust referred you to him!

Happy trapping!
The Cape Leopard Trust team