

CAMERA TRAPPING

Set camera traps in i) deforested site (no-restoration control) ii) restoration site and iii) nearest patch of mature forest. Leave camera traps in place about 3 months. Repeat in rainy and dry seasons. Use mammal handbooks (Francis and Barret, 2008) to identify the species captured.

Using the Reconyx Motion Sensor Cameras

Step 1: Check data collection equipment

Before turning on the camera, always check that the memory card is fully pushed in. It is important that you make sure that the card is inserted fully, and in the proper position, or it can damage the card reading hardware (Fig 2.1).

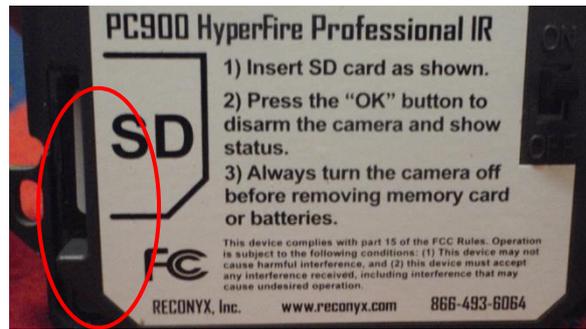


Figure 1 – SD card

You must also make sure that you check that the proper card is inserted into the camera, for example, *camera 2* should have the *camera 2* memory card. This way all pictures downloaded from the memory card are matched with the proper location.

Step 2: Check the moisture packet colour to make sure that it doesn't need to be changed



Figure 2.2 – Batteries

new one to the glue dot paper on a glue dot. After it is stuck, remove the glue dot by pulling up the moisture packet, and stick the new moisture packet back in the camera in the upper right-hand corner (as seen in the picture).

If the batteries need to be changed, you must make sure that they are replaced with batteries of the same type - mixing batteries may damage the camera (Fig. 2.2). Check the cameras for rusting when they are opened, and to try to remove as much as possible with a toothbrush, before resetting them.

Step 3: Set up the camera for taking pictures



Once the camera is turned on, the camera will require you to enter a code. All of the cameras are preset to the code “1022” and you can enter these numbers by using the left or right arrow buttons below the screen. After you have entered a number, push the “OK” button to move to the next number (Fig 2.3).



Once the code has been entered, a screen will appear telling you the camera information: number of pictures, space available on the memory card (‘0% FULL = 100% Memory space), and the remaining battery life.

*Note: Lithium batteries will last a LONG time in the field.



The next screen to appear will be your menu, reading “ARM CAMERA,” so you will need to use the arrow key to find the “WALKTEST” setting. YOU MUST DO A WALKTEST BEFORE ARMING THE CAMERA TO ENSURE IT IS POINTED IN THE CORRECT DIRECTION!



Once you have found the “WALKTEST” setting, push the “OK” button. This will put the camera into a test mode, and you can now close the camera, and place it on the tree.

*Note: When closing the camera, make sure that the seals are free from any dust or debris, and that the camera latch is fully closed.



Figure 2.3 – Screen set up

Figure 2.4 - Lock



Picture 1



Picture 2

On the back of each camera, there is a hole for the cable lock to go through (circled in Fig 2.4, picture 1). The cable locks hold the camera securely to the tree, and are inserted through this hole. Once the cable is through the camera, wrap the cable around the tree to tighten. There are three settings on the cable locks: “LOCK,” “CINCH,” and “UNLOCK.” When putting the camera on a tree, turn the key to the “CINCH” setting. This will allow you to tighten the cable without it slipping out of place when you lock it. Once you have the camera in the position, turn the key to “LOCK.” You are now ready for the WALKTEST.

WALKTEST: When the camera is in this mode, you can determine where the camera’s field of view is (that is the area where it will record animal movement). You need only to wave your hand in the desired place that you hope to capture on the camera. When the camera has detected movement, a red light on the front of the camera will flash (Fig 2.5). Walking in the desired area doesn’t always work because it can be seeing either your head or your feet. It is best to stay at a range outside the camera view, and wave your hand into the field of view at the desired elevation. It may take a few times testing the range before you become familiar with these settings. You may also have to adjust the tilt of the camera (usually by placing a stick behind either the top or the bottom) to reach your desired picture range.



Figure 2.5 – Red light



Once the WALKTEST is completed, and your camera is in the desired position, re-open the camera and press “OK.” This will take you back to the menu, and you need to scroll to the “ARM CAMERA” selection and press “OK.” (Fig 2.6)



Once you have pressed “OK,” the camera will begin a 10-second countdown. During this time, close and lock the camera box, and put on the small camera lock. You only have 10 seconds to do this, before the camera starts taking pictures, so stay out of the picture range. When you walk away, the camera is in record mode, so try to walk outside the picture range.

Figure 2.6 – walk test and arming

References

- Burton, A. C., E. Neilson, D. Moreira, A. Ladle, R. Steenweg, J. T. Fisher, E. Bayne & S. Boutin, 2015. Wildlife camera trapping: a review and recommendations for linking surveys to ecological process. *J. App. Ecol.* 52: 675-85.
- Francis, C. M. & P. Barrett, 2008. *A Field Guide to the Mammals of South-East Asia*. New Holland Publishers, 2008 - Mammals - 392 pages
- Jansen, P. A., T. D. Forrester & W McShear, 2014. Protocol for camera trap surveys of mammals at CTFs-ForestGEO sites. Internal Report Smithsonian Tropical Institute, Centre for Tropical Forest Science. Ver. 1.1 May 2014.

Steve Elliott
Updated 10/12/17