

# WILDLIFE CAMERA



**Quick start  
guide for  
Browning  
Dark Ops 940HD**

The production of this brochure is part of the Rural Landholder Initiative and the delivery of education materials to help landholders manage their land. We would like to thank Reconeco for their support in producing this resource.

If you would like to keep up to date with ongoing Rural Landholder Initiative projects, grant opportunities and other news, you can sign up to our Lismore Biodiversity News e-newsletter at [www.lismore.nsw.gov.au](http://www.lismore.nsw.gov.au):

Rural Landholder Initiative funding and field days will be announced via our e-newsletter and in our fortnightly publication *Local Matters*.

To talk to Council's Rural Landholder Extension Officer  
phone: 1300 87 83 87.



**RECONECO**



## STEP 1 Camera Prep

1. Open front panel by undoing latch on side of camera.
2. Insert batteries (6xAA) – battery tray release switch is located below control panel.
3. Insert SD card.
4. Turn camera on (a home screen with 30-second delay countdown appears – ignore the countdown).
5. Format card – work your way through menu\* to 'delete all' – for Browning this action formats the card. This is only done on initial set up as 'delete all' will delete all the images stored on the card.
6. Adjust settings – camera settings have been pre-set, however should be checked prior to use. Check the following settings:
  - Check date and time are correct
  - Operation mode – set to Trail Cam\*\*
  - Photo quality – set to 16 megabytes
  - Pic delay – set to 5 secs
  - Multi shot set to ON – rapid fire 4 shots
7. Once settings selected switch camera off.

\*Work through the menu by pressing the 'Mode' button initially and then using up/down arrows to scroll through Modes. Press 'Enter' when you want to change a given 'Mode' item.

\*\*You typically use video for the study of animal behaviour (experimenting with lures, baits and/or trap placement).

## STEP 6 Camera Trapping Data Sheet

Ensure a data sheet is complete for each monitoring period and returned to the surveyor with the camera and SD card.

Site: <i>Millstream Homestead Trail</i>		Date Set: <i>1/08/17</i>	Date Retrieved: <i>15/08/17</i>
Observers: <i>Peter and Grace Hampton</i>		Location: <i>1786 High Rd Lismore NSW</i>	
Broad Location Description: <i>Cattle farm 12km NE of Lismore. Camera situated near SW corner of bottom paddock.</i>			
GPS Coords:	Lat: <i>-28.82447</i>	Long: <i>153.328001</i>	
Broad Habitat Type:			
<input checked="" type="checkbox"/> Rainforest	<input checked="" type="checkbox"/> Forest <input type="checkbox"/> Eucalypt <input checked="" type="checkbox"/> Camphor <input type="checkbox"/> Other (describe)	<input checked="" type="checkbox"/> Riparian	<input type="checkbox"/> Cleared/Agricultural Land <input type="checkbox"/> Other (describe)
Additional Notes re Habitat: <i>Mixed Rainforest/Camphor forest along creek with very occasional Eucalypts, some with hollows.</i>			
Camera Type: <i>Browning HD</i>		Camera Code: <i>LCC01</i>	
Camera Direction: <i>Sth</i>		Camera Height: <i>50cm</i>	
Camera Setting: <i>Trail, 16 meg, 5 sec, Rapid 4.</i>			
Lure Option Info:	Distance to Lure: <i>2m</i>	Lure Type: <i>Oat/honey mix</i>	

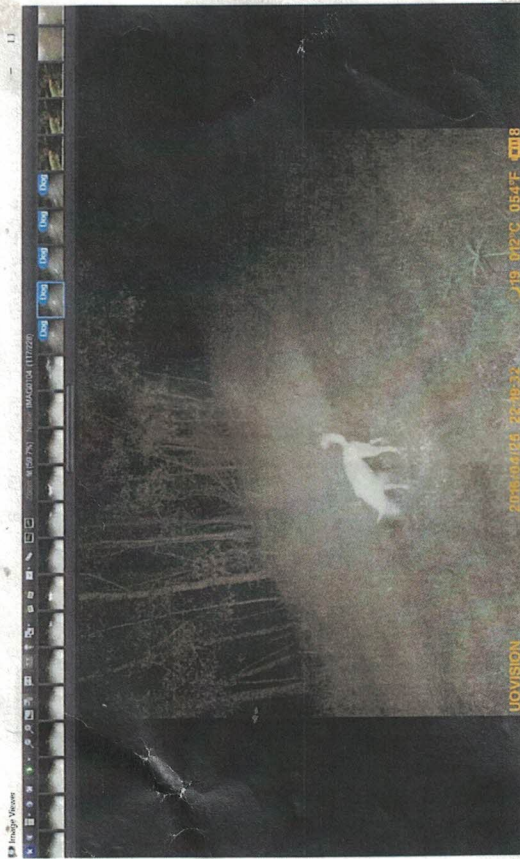
Additional Resources  
[www.pestsmart.org.au/camera-trapping-for-wildlife-surveys/](http://www.pestsmart.org.au/camera-trapping-for-wildlife-surveys/)

Manual with detailed instructions available at:  
[browningtrailcameras.zendesk.com/hc/en-us/articles/115004170627-2017-Instruction-Manuals](http://browningtrailcameras.zendesk.com/hc/en-us/articles/115004170627-2017-Instruction-Manuals)



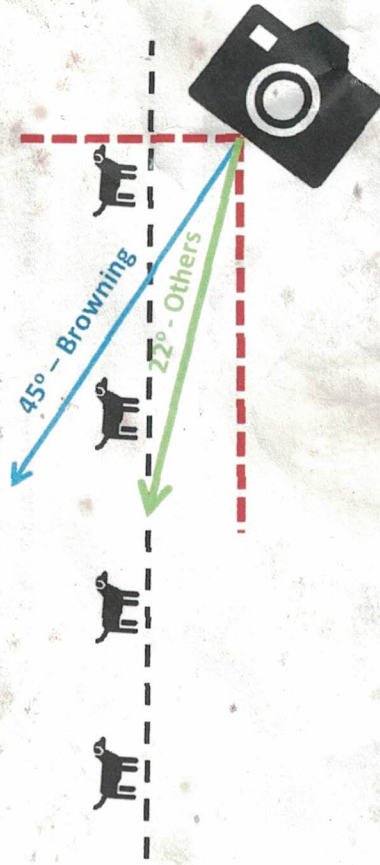
## STEP 5 Image Processing

1. Switch camera off.
2. Remove SD card.
3. Insert card into computer.
  - Images are best processed on a computer with a big screen (bigger the better). It's very easy to miss something interesting!
  - You can use your computer's standard photo processing software but a program like ExifPro is very handy, especially if you have a lot of images.
  - ExifPro is free but has a nag screen – \$20 is well spent on the nag-free version. You can tag/categorise images very easily with Exif.
  - Note that images will have a date/time stamp at the bottom.
4. Save images to your computer to ensure they are backed up.  
**DO NOT DELETE PHOTOS FROM SD CARD PRIOR TO RETURNING TO COUNCIL.**



## STEP 2 Camera Placement

1. Pick a tree/fencepost etc. on a track you suspect is a wildlife travel route. Intersections are good as are tracks along fence lines (or anywhere you get a 'funnelling effect').
2. Attach with cam strap and/or python lock.
3. Adjust height – for small mammals the typical recommended height is approximately 50cm (knee height).
4. Adjust angle to track – for a lot of cameras an angle of 22° to the given track is recommended. Browning recommend 45°. Maybe some experimentation is required.



*Camera Diagram*



## STEP 2 (CONT) Camera Placement

### Background Info

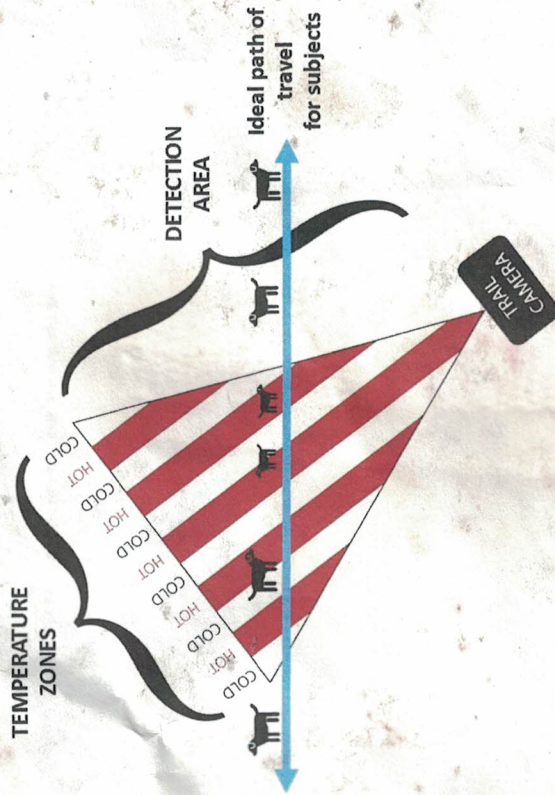
#### IR Detection

To achieve the best results, it helps to know how the actual detection process works before you place the camera. In summary:

- For Browning HD 940 the detection zone is cone shaped – 45° left to right and 30° top to bottom.
- Detection is not based solely on movement but is based on movement and heat (i.e. temperature variation).
- Detectors work best when there is a significant temperature variation between the subject and the background – stay away from sandy sites and don't point the camera in a northerly direction (reflection/sunshine/warming will interfere and cause false triggers and/or poor image quality – e.g. whiteouts).

#### Camera Detection Zones

- Browning HD



## STEP 3 Working with Lures (Active System).

Lures are optional and can be used to attract wildlife into the detection zone of a camera. This is termed an 'active survey' and aims to increase the probability of detecting wildlife.

1. Choice of lure (bait) depends on the target species. The following are recommended:
  - a. Herbivores – oats/peanut butter/honey mix (can add vegetable oil/vanilla essence too).
  - b. Carnivores (including ferals) – raw meat (dried if possible), raw chicken pieces, perforated canned fish/cat food (this putrefies quickly though and can then be a deterrent for some species).
2. Place the lure in a perforated container to keep the lure in place over the baiting period. For example use a small wire cage, layered chicken wire, perforated PVC pipe or wire tea infuser. A tea infuser or the like and/or perforated PVC pipe with insect screen over the holes are good as they also exclude insects.
3. Position the lure within the frame of the camera shot approx. 2-3 metres from the camera. Secure the lure container to a star picket or large tent peg to ensure it is not removed by wildlife.
4. Refresh the bait regularly.

Consider setting the camera to video when using a lure as it is a good way to study animal behaviour. Be cautious though as video uses more battery power and more space on the SD card.

*Note that we are not using video for the LCC study.*

## STEP 4 Run Camera

1. Motion test – helps to aim your camera at the target area
  - a. With your camera set in position, open the front panel, switch on and scroll through the menu to 'Motion test' and press 'Enter' to switch test on.
  - b. Move about within desired target zone and the red light on the camera will flash when you're detected.
  - c. Make sure motion test is switched off before arming camera (press mode button twice).
  - d. Press mode button twice once happy with the motion test. The camera will arm and begin a 30-second countdown before flashing RDY – Ready.
  - e. Walk away!!
2. Turning Camera off
  - a. When collecting camera simply open door and switch off.