



FIELD MANUAL 2018-19

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Introduction

Tasmania is home to amazing and unique wildlife – 33 species of mammal and over 180 species of bird. Many of our species, like the eastern quoll and forty-spotted pardalote, are found nowhere else in the world. But human activities such as land clearing, climate change and urbanisation, along with feral species such as cats, rabbits and deer pose a major threat to native species.

Wildlife monitoring is an essential part of protecting our native species. It provides valuable information about the areas where animals occur and how their populations are faring over time. It also identifies areas where there are high densities of feral animals, which helps to target control efforts. As a private landholder, you can play an important role in protecting our native wildlife. Monitoring is a big job that is made a lot easier by sharing the load. By getting involved and helping us identify important areas for wildlife you can make a big difference!

WildTracker™ is an ecological monitoring system developed by the Tasmanian Land Conservancy. It was trialled in southeast Tasmania in 2016-17 and is now being rolled out state-wide. We are working with landholders like yourself across Tasmania to establish a network of long-term wildlife monitoring sites on private land. The information collected by this program will be used to design better conservation programs and target feral animal control in the landscape.

We have created this manual as a resource for landholders. It contains instructions for monitoring the wildlife and habitat on your property and is divided into the following sections:

1. Establishing a Wildlife Monitoring Site
2. Setting a Camera Trap for Wildlife
3. Photographing Habitat
4. Recording Bird-Calls (optional)
5. Classifying Wildlife Images (optional)

Please be sure to follow the instructions for the first three steps. The mammal and habitat data is the minimum required for us to get a picture of what is happening in the landscape. Step 4 is optional and dependent on availability of recording equipment. Step 5 is also optional and requires extra training.

Any questions?

If you have any questions along the way or need help with any aspect of the monitoring tasks, then please get in touch.

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Establishing a Wildlife Monitoring Site

The site will be used to capture information about the wildlife and habitat condition of your property using the methods described later in this manual. On larger properties (>10ha) more than one site may be established.

Equipment	Time required
Star picket, camera bracket, mallet, property map, GPS or PDF Maps (smartphone app)	0.5-1 hour

Instructions

1. **Choose a monitoring site**

Find a location on your property that is easily accessible, where the vegetation is fairly open and where there are signs of animal activity (e.g. a track, diggings). The forest edge, beside a dam or on a disused vehicle track can make a great location.

2. **Identify a target area for the camera trap**

Ideally the target area should be a patch of ground at least 3 metres across where there is little vegetation that can be buffeted by the wind (this can trigger the camera inadvertently). If possible clear any vegetation that might trigger the camera using secateurs, loppers or a brush-cutter.

3. **Install the star picket**

Find a spot about 3 metres from the target area to install the star picket. Hammer the star picket into the ground with the side of the picket with the holes pointing directly at the target area. Keep hammering until the picket is firmly embedded in the ground (0.5m) and the top of the picket is about level with your chest. Place the yellow protective cap over the picket.

4. **Attach the camera bracket**

Connect the wooden bracket to the star picket on the third hole down from the top using the bolt and wing-nut. Make sure it is attached firmly.

5. **Record the location**

Make a note of the location of your monitoring site. If possible, record the exact location on a map, or record the coordinates from a GPS or smartphone. Email this information to us.

6. **Leave the star picket and bracket in place so that it can be used again in the future.**

Any questions?

Get in touch if you need advice or have any questions. Contact details are on the first page of this manual.

Setting a Camera Trap for Wildlife

Camera trapping is a method of monitoring wildlife that uses a wildlife camera to automatically record the animals that pass through a target area. The camera uses an infra-red sensor that detects the movement of an animal and triggers the camera. The batteries will last about 2 months and they will continue to capture images of animals this whole time.

Equipment

Wildlife camera, strap, gaffer tape,
fish oil

Time required

30 minutes

Instructions

1. Mount the camera

Attach the camera to the wooden camera bracket using the strap. Make it as secure as possible. Use gaffer tape if necessary. Check that the bracket is tightly attached to the star picket. Secure the strap so that it can't wave around in the wind.

2. Turn the camera on

Open the case and move the power switch to the ON position.

3. Lay the bait

Slosh about a measuring-cup of fish oil on the ground in the target area.

4. Check the camera

If you are curious then feel free to check the camera after a few days. Open up the case, move the power switch to the OFF position and eject the SD card from the base of the camera. You can view the images on your computer. Remember to replace and turn the camera back to ON.

5. Collect the camera

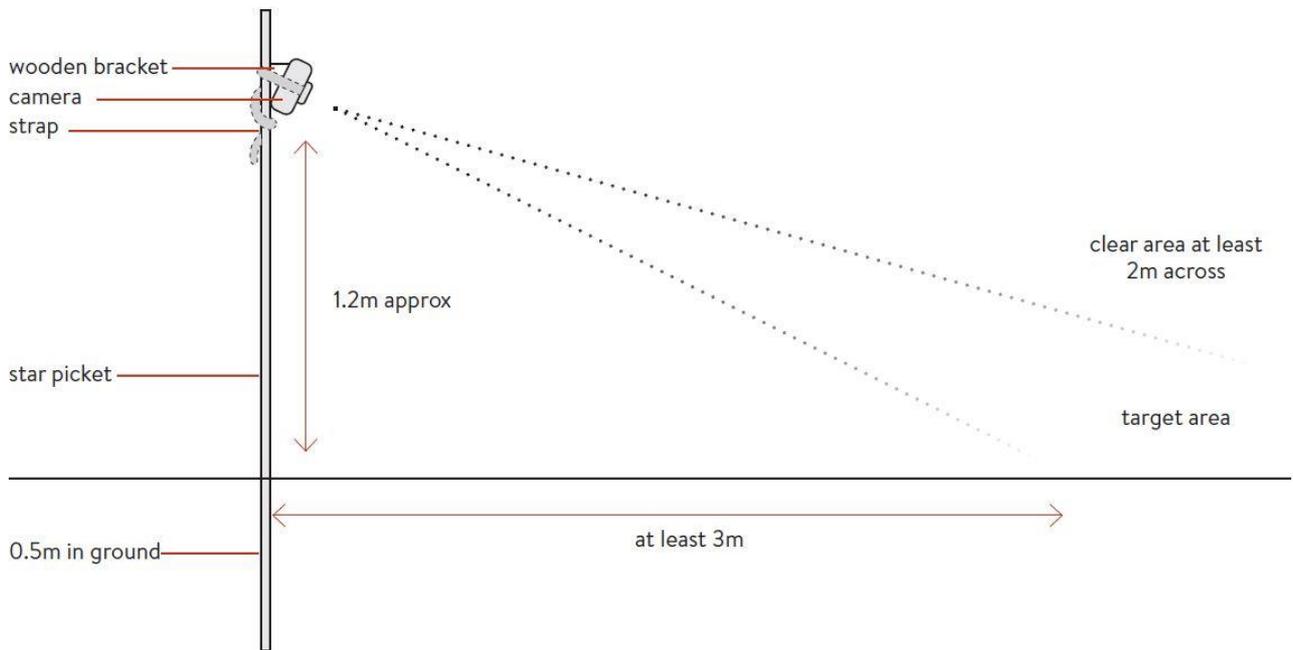
After 4 weeks go and pick up the camera. Unstrap it from the star picket, open the camera up and turn it OFF. Give us a call and let us know when you are done.

6. See what animals you've captured!

Look through the images captured either using preview on the camera, or by downloading them from the SD card.

Any questions?

Get in touch if you need advice or have any questions. Contact details are on the first page of this manual.



Photographing Habitat

Photo monitoring is an easy and effective method for recording changes in habitat and vegetation condition over time. A series of repeat photographs are taken at a fixed location. Multiple images can be stitched together to provide a panoramic view of the habitat surrounding a wildlife monitoring site. If you have a smartphone, you can use the panorama setting to make the process much easier.

Equipment

Camera or smartphone

Time required

15 minutes

Instructions

1. Position the camera

Turn your camera on and hold it on top of the star picket, resting it on the yellow cap to keep it steady.

2. Take the first photo

Start off facing roughly east and take the first photo, making sure to keep the camera horizontal (not pointing up or down).

3. Rotate and take a second photo

Turn the camera slightly (15 degrees) and take another image. Make sure that there is some overlap between the two pictures. Picking a landmark like a small tree can help you line up your shots.

4. Continue taking a series of photos

Take a series of photos continuing to rotate the camera slightly each time while stepping around the star picket. Keep going until you've completed a full circle of the compass (360 degrees). It should take 10-20 photos to complete a full circle.

5. Send the photos to us

Send the series of images to us by email or we can collect them on a USB drive when we collect the wildlife camera.

Any questions?

Get in touch if you need advice or have any questions. Contact details are on the first page of this manual.

Recording Bird-Calls

Using a digital sound recorder is a great way of documenting the birds on your property. Birds are most easily monitored by listening for their calls. While they are often hard to see, they are usually easy to hear. A trained ear can tell the call of every species.

Equipment	Time required
Smartphone or digital sound recorder (Handy H2 or Handy H2N)	30 minutes

Instructions

1. Familiarise yourself with the device

There are lots of different devices and apps for making sound recordings. Take some time to work out how to make a recording. The internet is a good source for this kind of information, or alternatively call one of us. Practice making a short recording at home using the instructions below before venturing into the field.

2. Timing and conditions

Birds are most vocal early in the morning, so recordings should be made before 10am. Weather affects bird activity and the quality of the recording, so go when the weather is calm and clear, with little or no wind. Take one sound recording at each monitoring site indicated on your property map.

3. Making a sound recording

- Attach the device to the top of the star picket using a rubber band.
- Open up the app (e.g. voice memo for iPhone), or turn the digital sound recorder on using the sliding button on the side of the device.
- Start recording. If you have a Handy H2 you need to press the red record button *twice*. If you have a Handy H2N then press the record button *once*.
- Say your name, the time, date, location and monitoring site number (e.g. HUVA01). This will help us keep track of which recording has come from which location. You don't need to speak directly into the microphone.
- Move away from the monitoring site as your presence can disturb some bird species. You will pick up more birds this way.
- Leave the device to record for 20 minutes.
- Collect the device, press the record button again to stop recording, switch the device off.

4. What happens next?

After we've collected the sound recorder, we will pass on the recording to an expert birder who will listen to the recording and write down all the species they hear. We will send you a list of the birds that are identified on your property.

Any questions?

Get in touch if you need advice or have any questions. Contact details are on the first page of this manual.

Classifying Wildlife Images

If you are reasonably computer-savvy then it would be an enormous help if you could identify all of the animals that have been captured on camera. If you'd rather not, then that's ok too - a TLC volunteer will classify the images and we will send you a list and some photos of the wildlife from your property.

If you'd like to get involved in classifying images, then get in touch with and we can arrange a time to give you some training and get you started. It takes on average 1-2 hours to identify all the animals from a 4-week survey. If you'd like to volunteer with TLC and help identify images from other properties too then that'd be much appreciated!

We run training sessions for groups and individuals in animal identification and use of image tagging software EXIF Pro and the web-based eMammal. Contact Matt on 0458 343 348 or mtaylor@tasland.org.au to find out more.

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