



Trail Camera Overview

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Towards Pest Free Waitaha
Practical Workshops
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Trail cameras ...

A very useful tool, part of your monitoring toolbox. But, very different ...

1. Traditional monitoring is not accurate, it's useful for showing presence or a trend.
2. Cameras are far more accurate.
3. There are many choices.
4. They need to be used correctly.
5. The data can be confronting. (there will be more pests than you think!)
6. And the data can be very useful!



Start Simple ...

Start with a camera or two. Get a feel for what they can do for your trapping efforts

1. Get the right camera for the job and your budget.
2. Take time to learn what works.
3. Treat them as a learning tool.
4. You may be shocked by the results!
5. They can help excite and engage your community, stakeholders & funders.
6. But be careful what you share ...



Your Best 3 Options

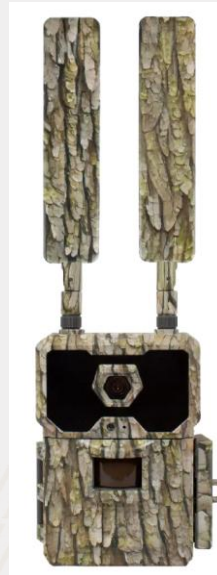
Browning Dark Ops Pro

- Cheap
- Easy to use
- Great images for sharing
- But no classification, have to collect SD cards and download



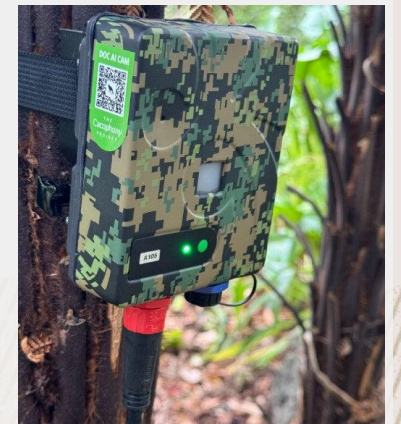
WiseEye DC2

- Well priced
- Easy to use
- Internet connected and app/online portal
- Detection alerts
- But no AI classification in NZ (yet)



Cacophony DOC AI Cam

- Most accurate
- A little more complex
- Automated AI species recognition
- Excellent online portal and reports
- But more costly



At a Glance

Feature	Browning Dark Ops Pro	WiseEye DC2	Cacophony DOC AI Cam
Camera Type	Standard trail camera	Cellular AI trail camera	AI-enabled thermal camera
Cellular Connectivity	No	Yes, excellent (multi carrier)	Yes
Ease Of Operation	Very easy	Very easy	Good
Detection Accuracy	Good, smaller animals trickier	Good, smaller animals trickier	Excellent
Photo and Video Quality	Excellent	Excellent	Thermal imagery only
Species Recognition	No	Not currently in NZ, manual tagging required	AI automated pest classification
Real-time Alerts	No	Yes (but not species specific in NZ)	Yes (NZ species specific)
Web based Portal or App?	No	Both	Web based
Reporting	No	Limited (esp in NZ context)	Good, improving over time
Battery Life	6 x AA Batteries, Excellent battery life	Rechargeable Li-ion, removable. Moderate battery life	Rechargeable Li-ion, external/bulky. Moderate battery life (depends on mode)
Solar Enabled?	No	Yes, additional purchase	Yes, additional purchase
Camera Cost	\$389.00 + GST	\$578.26 + GST, incl battery	\$1,499.00 + GST, incl battery
Subscription Cost	-	From \$15/mth (can vary)	Data Storage: \$159 + GST/yr Data Pla: \$35 + GST/mth (can vary)
Best Use	Basic monitoring, quality imagery	Remote monitoring, Real time alerts (with limitations)	Remote monitoring, predator classification & benchmarking, real time alerts
Major Drawbacks?	Have to collect and process SD cards, including manual classification	No automated classification of NZ pests, larger images and video stored on camera (you must download them). Limited reporting.	More costly and bulkier (battery) than other options. Battery life can be shorter depending on mode.
Summary	Cheap, easy to use and good quality images. Perfect for community groups to observe animal behaviour.	Well priced, easy to use, Internet connected, an app and online portal to view images. A step up from a Browning.	Designed specifically for NZ pests, most accurate detection, automated pest classification, good online reporting.

What are your goals?

Your approach for using trail cameras will depend on your goals, budget, target species and how often you can service your cameras. The “right camera” depends on **your use case**.

Observe animal behaviour?

- See how predators behave around traps
- See what you're NOT catching in your traps!
- Improve trap placement and use
- See seasonal changes
- Engage volunteers and funders

Best Camera? Either trail cams

Detect presence or absence?

- What predators do you have
- Detect new incursions
- Measure impact and tell your story

Best Camera? WiseEye, or ideally DOC AI Cam

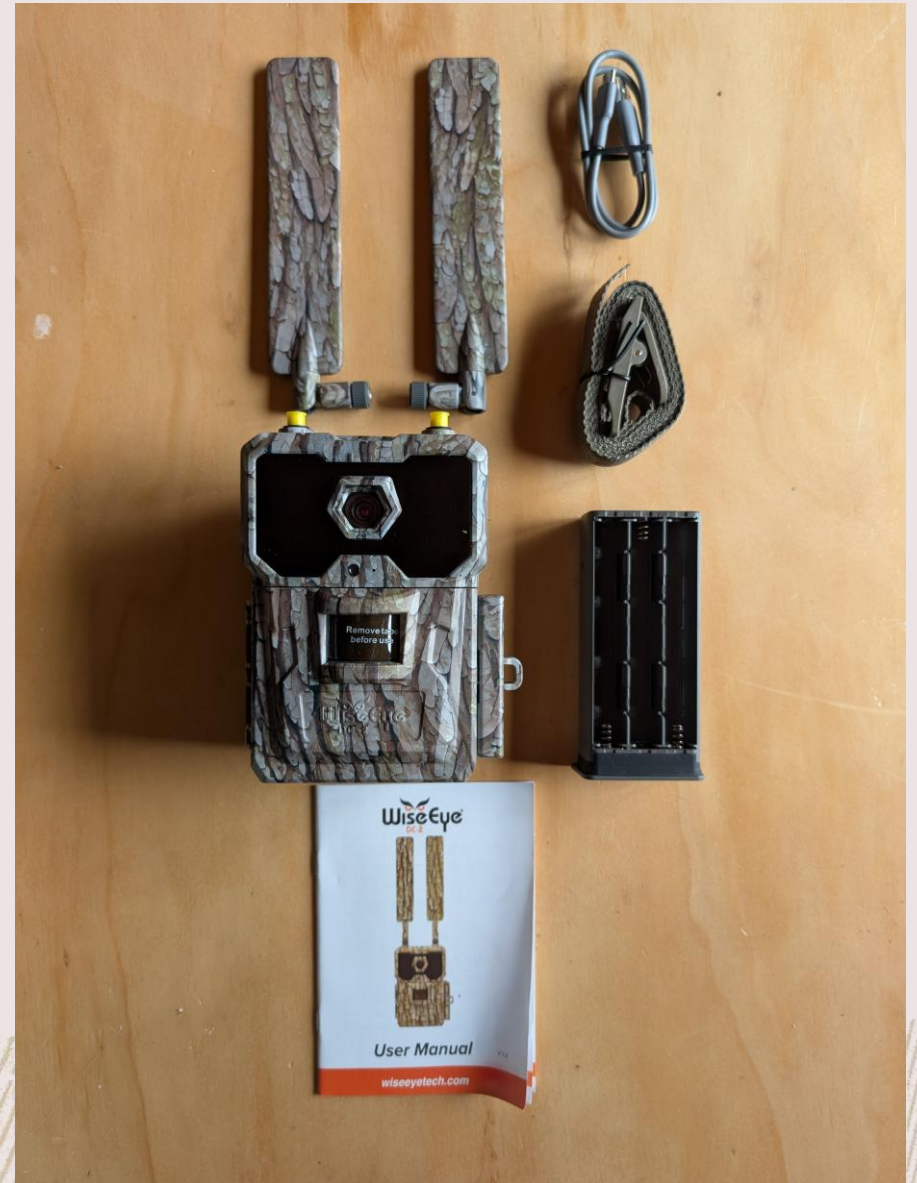
Monitor & track abundance?

- Have predator numbers have changed over time
- Get a baseline for comparison
- See if your predator control is working
- Measure impact and tell your story

Best Camera? DOC AI Cam

Get to know your camera

1. Be clear what role (goal) you have for the camera, this determines setup
2. Test it at home first
3. Think about the delay to recording (to reduce false triggers) and will you use a “burst” of images
4. If its internet connected, test the connection, ensure images are showing up
5. Are you going to use video, or stills, or both? Or can your camera even do that?
6. Plan where you’ll place it. A fixed location, or a series of plots?



Plots, useful for tracking predator numbers

Especially useful if you only have one or two cameras. The idea is to move them around.

1. Define a series of monitoring plots
2. Position the camera in a spot for 2 weeks.
3. You could do this annually, or maybe two or three times per year to check if there are seasonal fluctuations
4. Every year, position the camera in the same spot(s) for the same time period
5. Keep careful records to compare changes over time



Dashboard

Your projects +

160 JUBILEE

Dashboard

Activity

Devices

Locations

My preferences

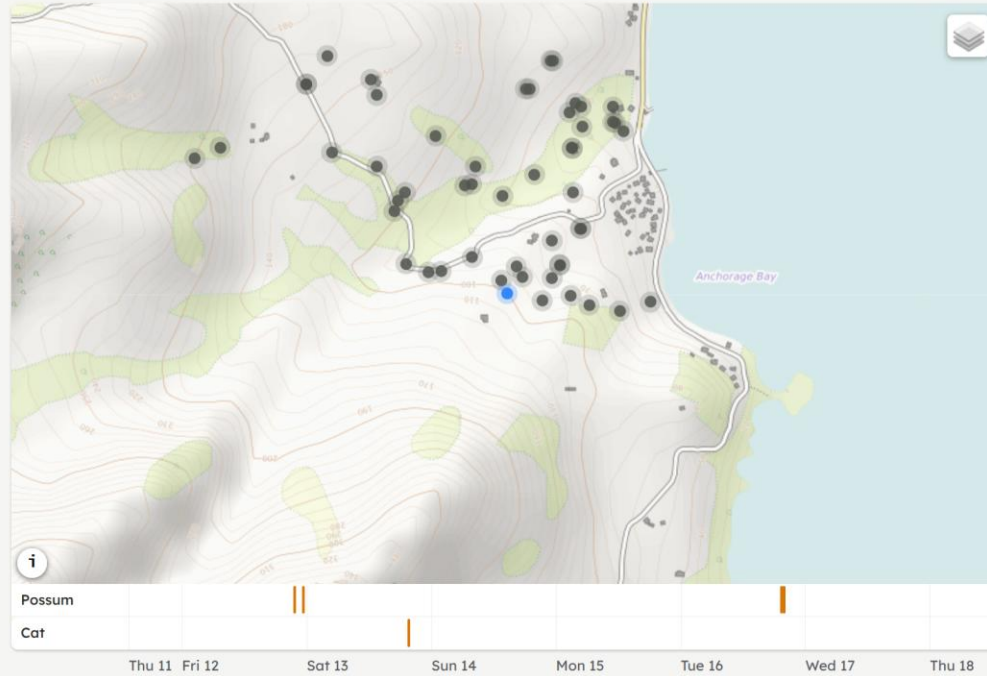
Manage project

Species summary

1 Cat

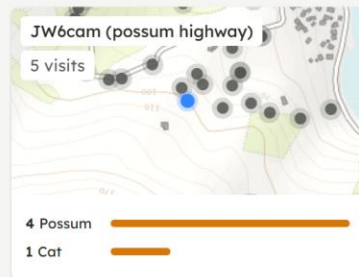
4 Possum

Visits summary



- Night of 16-17 June 2026: 2 Possum
- Night of 13-14 June 2026: 1 Cat
- Night of 12-13 June 2026: 2 Possum

Locations summary



Know thy camera (and technology)

1. Traditional trail cameras designed around low-power PIR-triggered capture
2. Cacophony cameras designed around continuous heat analysis (always on)
3. PIR sensors don't detect evenly across the whole image, they use segmented detection zones
4. Movement is strongest when an animal crosses across those zones rather than moving straight toward the camera
5. Camera placement, angle, distance to target are very important



On the WiseEye camera the circles represent the detection zones, similar to other trail cameras (but not the DOC AI).

For maximum of chance of detection, the circles should be centered on or near where animals are likely to cross.

In comparison, DOC AI cameras will trigger based on detecting heat anywhere within the frame.

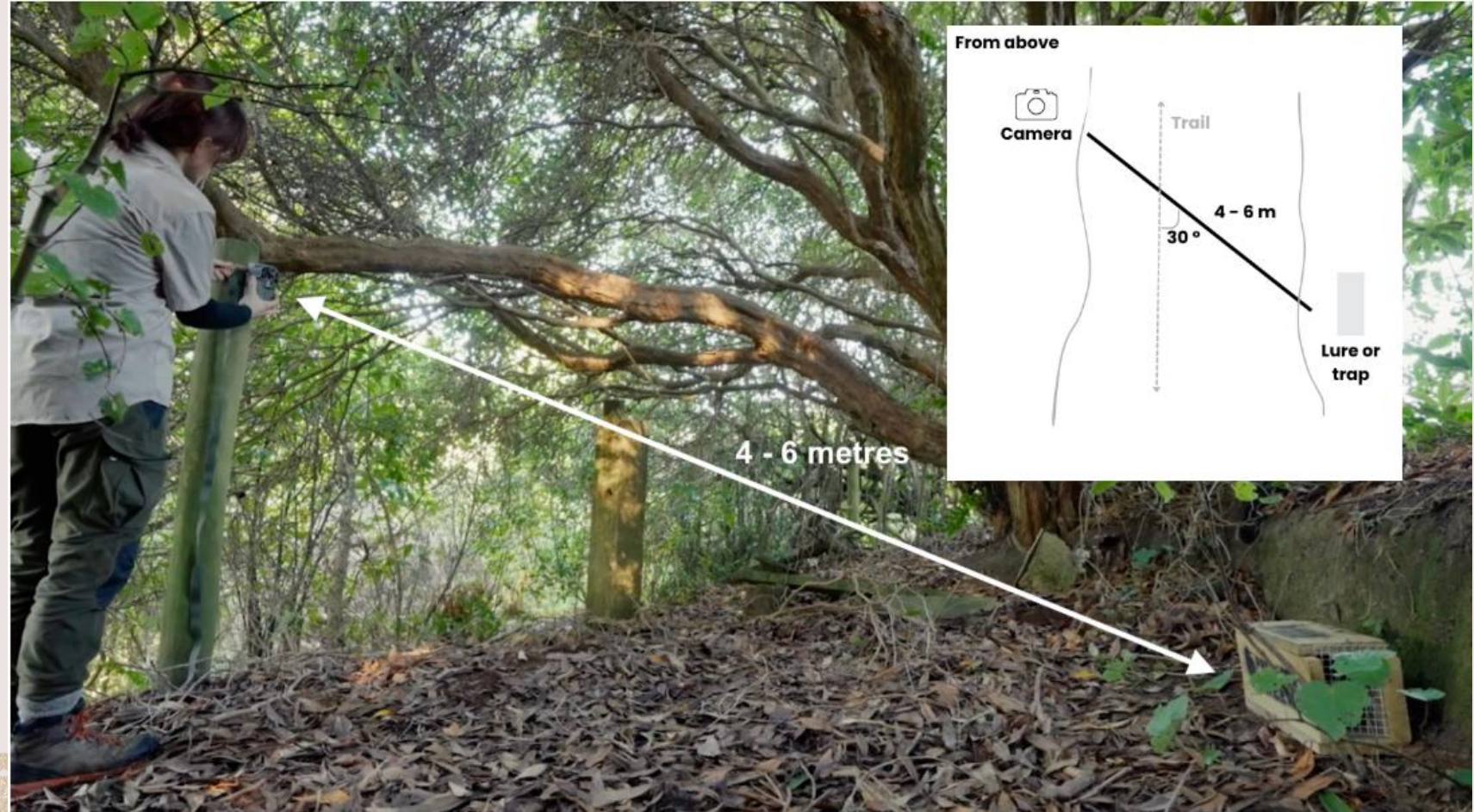
Camera placement and set-up

1. Choose sites where predators are likely to travel — along tracks, ridges and spurs
2. Be prepared to move your cameras around if you have few detections
3. Point the camera to face between south-east and south-west. Reduces sun strike.
4. Try to ensure the “background” isn’t open, esp. bush transitioning to grazing. Reduces contrast.
5. Keep the focal distance short, 4-6m max to the main object
6. Ensure there are no branches or bushes near the camera which could trigger movement



To observe animal behaviour...

1. Place a camera at chest height about 4-6m from a lure
2. Or pointing at a 30-degree angle to a predator trail (not across)
3. If the camera is at right angles to the trail, the shutter speed often won't be fast enough to catch an animal running along the trail.
4. Try 15-20 second videos or a photo burst.



Note that comments about shutter speed, bursts, and video/photo choices are trail camera specific and don't apply to DOC AI cams

To detect and count predators.....

1. Place the camera closer to the ground and 1.5-2m from a lure
2. Try a 3-5 shot burst of photos.
3. Ship rats can spend lots of time in trees or fences. Try pointing a camera up at a lure if you're not seeing anything on the ground
4. A cheap rubber door wedge is useful for angling the camera down or up.



Tips for getting quality, useful footage

1. Avoid accidental triggering. Movement, heat and light can trigger sensors
2. Attach the camera to a sturdy tree or post
3. Clear leaves, grasses, ferns and small branches to about 2m in front of and behind the camera.
4. Ensure the lure, trap or chew card is centered in the camera view finder, so you can use it for scale eg. when telling the difference between mice and rats.



Summary

1. There's no "right or wrong" camera. All the camera options here are good.
2. Define your goals, is it observing behaviour, or is it benchmarking, or something else?
3. Your goal(s) determine **your best camera choice**.
4. The additional cost of internet connected cameras is easily be offset by time saving.
5. If classification of pests is important to you, this can also be very time consuming without automation.
6. Whatever your choice, cameras are a significant step up in your monitoring efforts. They will help you better understand animal behaviour and become better trappers!





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