Marna Banggara

HEALTHY, PROSPEROUS COUNTRY

Tech in the project tool box

Large areas of thick scrub? Elusive species to monitor? Limited time and money? Here's how the strategic use of emerging technologies is enhancing conservation planning, action and monitoring.

Telemetry monitoring of reintroduced yalgi

Translocated brush-tailed bettongs (yalgi or yalgiri in Narungga language) were fitted with GPS and VHF transmitters, with data collected via on-ground tracking and a remote telemetry tower network. Telemetry helped monitor the establishment and survivorship of reintroduced yalgiri in dense native vegetation.

The data guided monitoring effort and informed habitat use, survival, and movement patterns. Interestingly, when the transmitters were tracked down for retrieval, the yalgiri had often woven the transmitter tags into their nests.

Did you know?
Yalgiri collect material with their tails to build nests for their homes?

Integrating AI and remote sensing into predator management

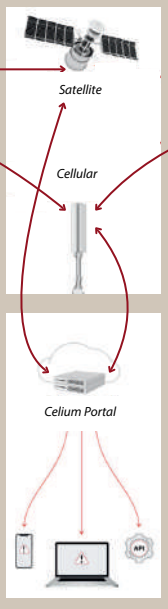
Feral cats and red foxes can be as elusive as the threatened species Marna Banggara is working to protect. We're adopting remote camera traps and AI image detection tools such as eVorta to streamline and boost our predator monitoring efficiency, whilst Felixer™ and Celium trap-alert technology boost control efficiency, effort and responsiveness. Images show an example of the various technologies in the field, and a coverage map.

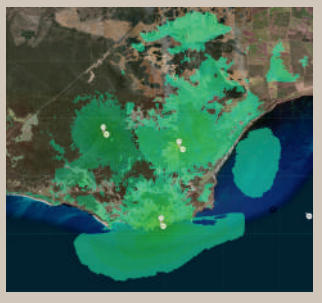
Felixer and camera in field

remote sense cameras

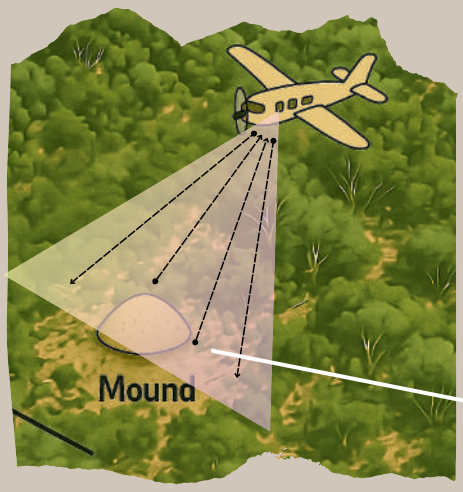
eVorta AI classification

Celium trap-alert technology





LiDAR and spatial analytics for mapping malleefowl mounds



High-resolution Light Detection and Ranging (LiDAR) data is analysed by Anditi's patented malleefowl mound analysis algorithms which identifies potential nesting mounds hidden within dense, intact scrub. Potential mounds are ground-truthed by project staff, trained volunteers and local rangers; significantly improving regional species knowledge. Recent surveys in 2021 and 2024 identified 797 potential malleefowl mounds across the project area. In 2021, 94% of the mounds visited were confirmed as malleefowl mounds – which is 292 potential nesting sites we didn't know about pre-survey!

Technology does not replace people; it empowers them.

By combining smart tools with local knowledge, the Marna Banggara project is breaking new ground in how we plan, measure, and adapt restoration at landscape scale. These approaches are scalable, practical, and ready to inspire the next wave of landcare innovation.

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