Dingo? Bingo! How you can help dingo research from your home

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Credit: Harry Vincent/Taronga Conservation Society Australia

Can you tell your cats from your dingoes? Your wallabies from your wallaroos? Then Dingo? Bingo! is your chance to identify dingoes (and other wildlife) in photos and help scientists better understand and

manage dingo populations in particular.

An online citizen science project Dingo? Bingo! requests the public's help in detecting dingoes and other animals among images retrieved from a network of camera-traps. Cameras were installed in the Myall Lakes region of NSW, which is home to an important coastal population of dingoes and a long-term study into dingo ecology and management. The Myall Lakes dingo project, supported by the Hermon Slade Foundation and Taronga Conservation Society Australia, aims to develop and test non-lethal management techniques and add to our understanding of dingo behavior and ecology along the way.

Dingoes are an iconic and valuable part of the Australian ecosystem, but where dingoes co-occur with humans—be it campgrounds, towns, or livestock areas—they can also cause issues, and these conflicts are conventionally managed by lethal means. The question is are there non-lethal alternatives for deterring dingoes from these places?

Researchers from UNSW Science and Taronga Conservation Society Australia are testing whether the dingoes' own signals can be used to deter them and invasive predators from particular areas. Dingoes use howls and scent marks to communicate ownership of space, and so by simulating their presence in an area the team hope to be able to deter them from specific areas.

As Dr. Neil Jordan, lead researcher and Senior Lecturer at UNSW, explains, "In some circumstances, living alongside dingoes can be challenging. This project hopes to develop tools and strategies to limit the negative impacts that dingoes have in specific areas, while still allowing them to perform their ecological role as apex predator across the wider landscape."

Part of that ecological role may be suppressing invasive foxes, and as

Taronga's Behavioral Biologist and co-lead researcher Dr. Ben Pitcher explains, this is also an important part of the team's work. "There's good evidence from a number of studies that animals retreat from the sound of their predators. As dingoes sometimes kill foxes and cats, we're also testing the idea that these smaller carnivores may avoid areas where they believe dingoes are present—where they hear a dingo howl for example."

To test their idea, the team have set up 12 automated speaker systems, playing back dingo howls intermittently through the night. Over 60 remote camera-traps were also positioned around these sites along the dingoes' main thoroughfares: trails and roads. And that's where Dingo? Bingo! comes in.

Sifting through 50,000 images is a tall order for any researcher, and so the team decided to share the load and the joy of participating in this work. Nevertheless, as UNSW Ph.D. student Brendan Alting explains, the team remain active participants themselves, "It's always awesome seeing an unexpected quoll or koala pop up on an image, and so I wouldn't say we've been 100% successful in passing this on entirely to citizen science– it's quite addictive!"

Getting started on Dingo? Bingo!, users are notified of the various animal groups they might observe in the photos (bandicoot, horse, reptiles etc.), instructed how to submit their identification, and, finally, which details they might add. Is it a dingo? Bingo!

To ensure they're accurately classified, each photo is displayed to 20 users, and only if there is a high degree of agreement are they classified, with the research team reviewing any debated classifications.

As Dr. Jordan explains, "You'll probably see a number of fox, cat and dingo images on the platform, and this doesn't necessarily mean that the

experiment hasn't worked. To properly test for any effect of the howls we are also playing back control sounds, including ambient noise, and we'll compare these treatments using the data contributed through "Dingo? Bingo!'"

The entire collection of Dingo? Bingo! photos are now available and ready for public classification, so feel free to dive in immediately and help the research team discover just how effective their deterrents were.

Pending the success of this trial, the team behind Dingo? Bingo! and the Myall Lakes Dingo Project plans on furthering their work on non-lethal management and into dingo behavior and ecology more broadly.

Provided by University of New South Wales