

# Burning for bettongs

BY HAYDEN JOHNSON

AMONG smouldering embers and the crackling sounds of fire, Riana Gardiner listens closely for the sound of a Tasmanian Bettong on the move.

At a fuel-reduction burn between Cressy and Campbell Town the University of Tasmania student is attempting to learn how bushfires affect the movement of the small marsupial.

Ms Gardiner's work is hoped to learn more about the Tasmanian bettongs' "interesting relationship with fire".

"When fire happens they've got more feeding opportunities because of the exposed soil," she said.

"The reverse of that is that feral cats are also attracted to burns and I'm trying to look at the relationship between Tasmanian bettongs and fire, and their movement, and whether the activity of cats impacts their movement."

Previous studies have shown that burns conducted appropriately provide feeding opportunities for small and medium-sized mammals, like the bettong.

She has spent many long nights trapping the bettongs before weighing and micro-chipping them, and fitting a GPS collar.

During the prescribed burn on Wednesday Ms

Gardiner used a portable antenna to find the locations of the bettongs and follow their movements.

Since the project began 13 bettongs have been trapped and five were equipped with GPS collars.

Previous studies have shown feral cats can travel up to 20km to detect a fire, where they will hunt.

"They'll feed there for about two weeks, taking advantage picking off small animals, lizards and invertebrates," she said.

Ms Gardiner said she had an affection for the "feisty" creature.

Wednesday's research was part of Ms Gardiner's PHD study, and was organised during the State Fire Management Council's Red Hot Tips initiative.

That initiative aims to improve the skill of private landholders in rural areas to manage bushfire risk on their properties.

"We work directly with farmers by providing them with the skills to manage their own burns," council chair Ian Sauer said.

He said the burn at Barton was selected for its added research benefits.

"It's important that we understand the ecological impacts of bushfire and controlled burning," he said.

Ms Gardiner's PHD is expected to take several years.



**TRACK:** UTAS researcher Riana Gardiner listens through an antenna for Tasmanian bettongs around a fire.