Rise in bandicoot numbers delights ecologists

By Sarah Chenhall

A surge in southern brown bandicoot sightings in surrounding bushland has delighted local forest ecologists who have been working to save the endangered species for more than five years.

At least 112 sightings of the omnivorous mammals were recorded in state forests over the summer, an increase of more than 100 since a predator baiting program targeting foxes began in 2007.

Eden based Forestry Corporation (formerly Forests NSW) ecologist Peter Kambouris said 40 sites are surveyed across 100,000 hectares seasonally.

"As a result of continued monitoring and management of key threats like predator control, we're starting to see these guys pop up where we've never seen them before and in areas where you wouldn't expect them to be either," Mr Kambouris said.

"We're getting really good data. This bandicoot is endangered and is one of the key species we're interested in but we are also picking up data on other species like the long nosed potoroo."

He said bait uptake at some sites has dropped by half to as low as five per cent.

Conversely, sightings have risen from one in 15,000 sur-

vey nights prior to 2007, to 112.

"It's become clear that the most significant threat to the southern brown bandicoot and other threatened forest fauna is not timber production or fire, which they tolerate and recover very well from, but predation from the fox."

The surveys are helping to answer questions about impacts on the southern brown bandicoot, such as disturbance to the forest for timber harvesting, predators, or baiting which began in 1992.

"This is really the stronghold for them, these south coast forests are the perfect environment," Mr Kambouris said.

"They are pretty adaptable to change and disturbance, like most native fauna, they've evolved in an environment where fire was a fairly regular occurrence."

Despite being omnivorous, it's believed they find the meats used in baits to be distasteful.

"There's been a fair bit of research gone into the design of a delivery mechanism of bait that was going to be not attractive or easy for native or non-target fauna to get," he said.

"Being a meat based bait, and buried, means it's not attractive to an animal that is after a bug or a fungi or a seed."

Before remote cameras Jervis Bay.

became the main source of data collection in 2009, ecologists relied upon hair tubes, a plastic tube covered with double sided tape, to collect hair samples from all animals who moved through the undergrowth at the survey sites.

The hair was then analysed by a specialist at Genoa.

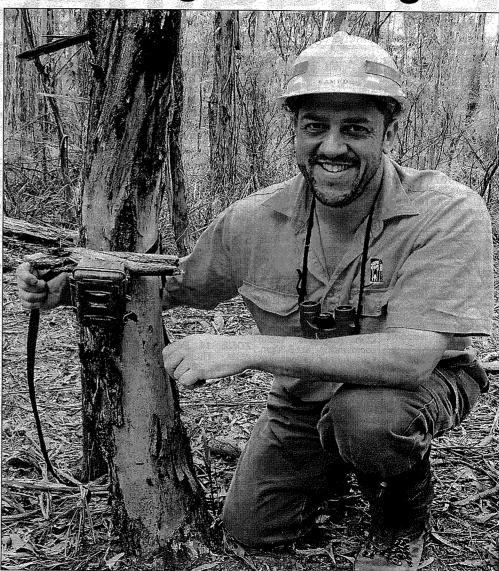
"Before we had remote cameras we put 10 hair tubes at each site, which is 400 tubes," he said.

"It takes a fair amount of time to set up all the equipment, let alone get into the field to set it up, and sometimes we have to cut our way into the sites."

Each camera can generate 10,000 images, which take days to go through but for scientists that's fast data recovery.

Core sites include areas north of Wonboyn Lake, Narrabarba, Maxwell's Walk, Wallagaraugh and Yambullah which are used for a range of activities including reduction burns or timber harvesting, or where forestry activities are excluded.

The success of the program has also led to a collaboration between the Federal Department of Sustainability, Environment, Water, Population and Communities and the Forestry Corporation to reintroduce the threatened long-nosed potoroo back into Booderee National Park, at Jervic Bay



 Eden based Forestry Corporation ecologist Peter Kambouris pictured checking cameras at Yambulla State Forest for the summer monitoring session of bandicoots.