Left: Black-flanked rock wallabies at home. *Photo: © D. Parer and E. Parer-Cook*

Below: Textured pads on the hind feet help the wallabies to navigate their rocky habitat with confidence. *Photo: Briana Wingfield*

FELIXER — FERAL CAT CONTROL DEVELOPMENT

Gillian Stack

The substantial impact of feral cats on native fauna is well-established — they are implicated in the extinction of more than 20 of Australia's native mammals and the reduced abundance and distribution of many more native species.

While DBCA's Eradicat® feral cat baits are showing promising results in some areas during field trials, additional methods of feral cat control are also being developed for locations or seasons when baiting may not be effective or possible.

One such method is Felixer, a device that targets cats through their strong grooming instinct. The Felixer grooming trap has been developed by environmental consultancy Ecological Horizons, and shows promise as an effective supplementary method of control. It uses an array of ranging sensors to identify the shape and speed of passing animals. Feral cats have a higher shoulder and belly line than many similarly sized native animals, and a different gait. When a target animal (feral cat or fox) is identified from the pattern of sensors activated, a sealed dose of toxic 1080-based gel is squirted onto the animal. The grooming response of the cat or fox results in the gel being ingested.

Fauna species from WA generally have a tolerance to 1080 toxin due to it occurring naturally in native *Gastrolobium* plants ('poison peas'). Introduced animals have not evolved with the toxin, and it is lethal even in small amounts.

The design of the Felixer's weather-proof, solar-powered unit has been refined and improved over several iterations with a view to its eventual commercialisation. This could offer a valuable (although expensive) new tool for land managers. It should be noted that this method of detecting feral cats and foxes would also target pet cats and small dogs, so use of a grooming trap would be constrained in residential and rural areas unless cat -sized pets were wearing special tags that block the Felixer from firing.

A two-year research trial is currently being conducted by DBCA in the Pilbara to verify the target specificity and effectiveness of the units in northern quoll habitat. This project is a collaboration between DBCA, Roy Hill Holdings, Fortescue Metals Group and Ecological Horizons. The units were initially used in photo-mode only while checks were made on accuracy of target detection. High accuracy rates of target/non-target detections have been reported in the trials conducted to date, and introduction of the toxic gel is planned.

The success of the grooming trap depends on the cat walking past the unit. Speakers play audio-lures such as recordings of birds and mice to entice predators towards the unit, and it will be interesting to see if this is effective.

The grooming traps could be very useful in areas where there is a natural bottleneck in the landscape, or a special population which requires additional protection. They would be particularly useful around threatened species enclosures that are patrolled by cats, or on peninsulas or otherwise narrowed vegetation that would increase the likelihood of feral cats coming into contact with the unit.

Felixer enquiries can be sent to felixer@thylation.com.

A northern quoll investigates the Felixer and is identified as a non-target. *Photo: Judy Dunlop/DBCA*