

Beef⁴ and the BEAST



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Department of Primary Industries and Fisheries

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A co-operative project between producers and the Department of Primary Industries and Fisheries evaluating the impact of dingoes on the beef industry

Technical challenges with the new Argos GPS collars

In November 2006, we captured 12 wild dogs in Kumbarilla State Forest south-west of Dalby and fitted 10 with satellite collars; including seven new hybrid Argos GPS collars that record and store hourly GPS locations. For two hours, every three days, the new collars 'turn on' to transmit, via satellite, their last GPS location. These hybrid collars have Argos and UHF transmitters, ADO (automatic drop off) and a GPS data logger. The GPS locations are far more accurate than the Argos location—a few metres compared to 0.1–1.5 km.



An Argos GPS collar.

One of the consequences of more features on a collar—apart from the additional weight—is that more things can go wrong; and they did. All seven hybrid collars failed to transmit a location. In December, we recovered all the faulty collars and returned them to the manufacturer for repair.

We found that some of the wild dogs captured in November had 'potholes' in their toe pads six weeks later — but only on the foot that was trapped. Veterinarians advised that the cause of these post-capture injuries was "vascular compromise resulting in necrosis of extremities", or in other words, the tips of the pads died from lack of blood flow. Wild dogs are usually not released once trapped; if they are, their feet are not inspected.



Erosions found on the toes of some trapped wild dogs six weeks after capture.

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Other critical factors may include the rubber padding on the jaws and the age or size of these dogs when captured (about 8–10 kg and five months old).

After this finding we began to monitor the feet of wild dogs, held at our Inglewood facility, four to six weeks after they were captured. Wild dogs that are trapped during routine control programs (using a variety of offset, laminated and rubber-padded soft-catch traps) are occasionally used for ethics-approved, pen and laboratory trials. To date, we have not seen any erosion on the toes of adult dogs that over six months of age; this suggests that age is an important factor.

We will email future issues of the newsletter to as many people on our current circulation list as possible (industry, local and state government agencies). To receive a PDF copy, please forward your email address.

Progress at Kumbarilla

In late January to early February 2007, we captured and collared another nine wild dogs in the same area. The additional two months meant that those dogs born in 2006 were stronger and heavier. We monitored these dogs until October 2007.

QPWS has identified Kumbarilla State Forest as a hot spot for wild dog control, and it offers some additional interest to this dispersal study. Part of the forest is sandwiched between the Inglewood–Millmerran check fence on the western side and the Wambo check fence on the northern and eastern sides; the Darling Downs–Moreton Rabbit Board’s rabbit-proof fence divides the area. Five of the 10 collared dogs are currently located within the netted area; to disperse, they have to negotiate one of the netting fences.

In February 2007, the solitary yearling male #19 was shot when found north of the Wambo check fence. He had escaped through a hole two days earlier into an area with sheep and goats.

Dog #21, a yearling male, was shot in early April by the grazier/forest lessee because it was harassing stock. Yearling female #23, who occupied the same area as #21, died in mid-June, possibly from starvation or bait—we had earlier observed her chewing on the fresh leg of a weaner calf.

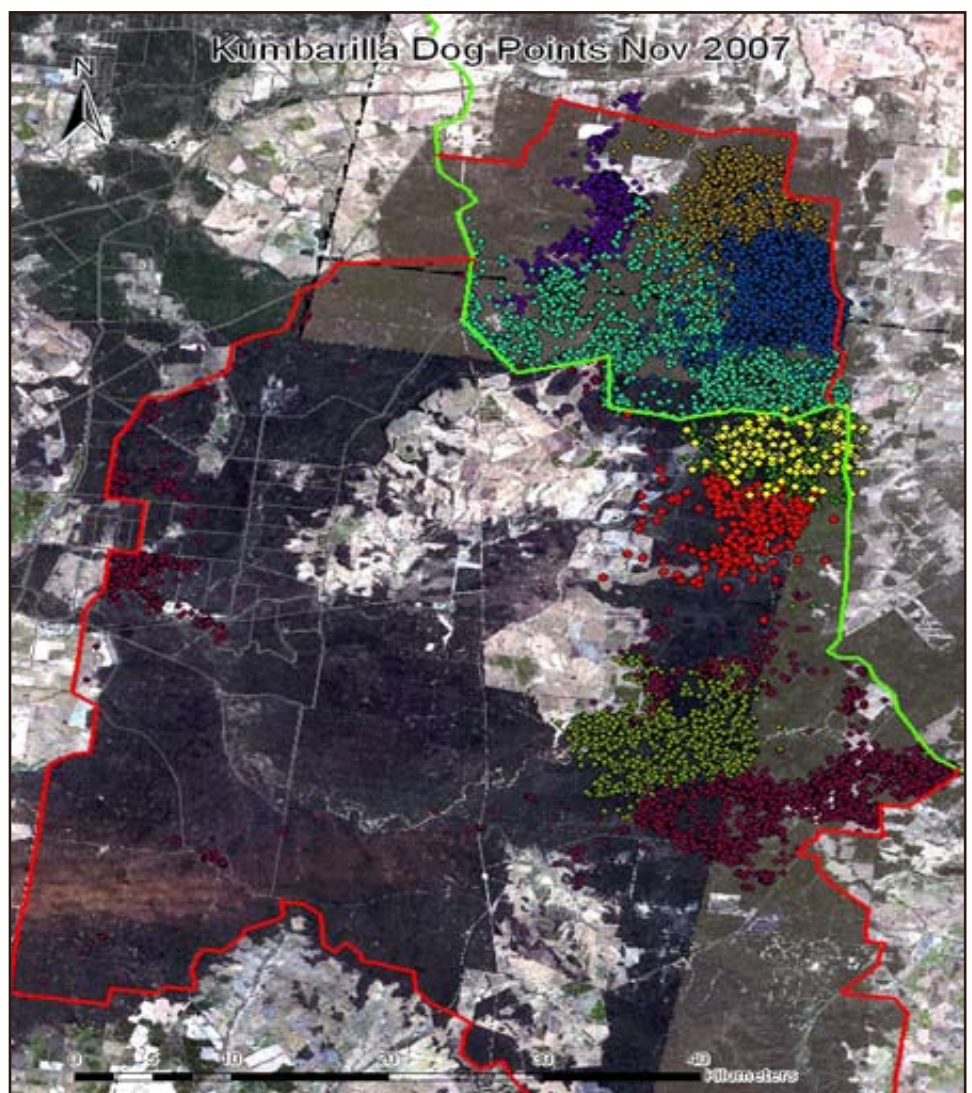
When captured in February, dog # 27 was a slightly built 6.5 kg female and too small to collar. In August, this animal was trapped at Opal Creek—a property next to the state forest, and five kilometres away from where it was ear-tagged. When killed, the dog was still small-framed and non-lactating, but healthy, and weighed 10.5 kg.

A 1080 baiting program occurred in mid-September. Before August, dog #25, a solitary male, made a series of moves away from where it was trapped. Most of the time the dog was wedged between the rabbit and check fences adjacent to the grid in the fence on the Millmerran–Western Creek Road.

In August, dog #25 skirted the territories of a known breeding pack (territory of #22), following the forestry boundary north until he hit the rabbit fence on the Dunmore–Cecil Plains Road. He then travelled along the fence for about 50 km until he reached the Weir River. Shortly afterwards he retraced his steps back along the fence. Returning through his former territory, he continued south to the

Millmerran check fence and then walked this fence north for 20 km until he came to his previous destination on the Weir River. During his brief absence, the Weir River property had been baited with 1080; dog #25 was sighted several times on this property before the owner’s son destroyed it.

Trapping and baiting appears to have facilitated the expansion of an old female, wild dog #17. She bred in previous years but did not breed or have any companions during 2007. While she didn’t leave her territory, she expanded her territory and shifted her core area to incorporate the adjacent grazing properties that had trapped three dogs in August and baited in September.



Map of Kumbarilla locations

Wild dogs in the central west

We are also interested in how wild dogs operate on and around sheep properties. In May 2007, we collared three wild dogs on sheep properties in the Blackall area—two of the dogs were found to be a breeding pair. The third, a 19 kg black and tan male dingo, (#31) is particularly mobile.

He normally occupies a small territory straddling the Barcoo River a few kilometres north-west of Blackall, but on two occasions, one month apart, he has made a 200 km circuit to the south-west going as far as Idalia National Park. He has also twice done a 70 km circuit in

the opposite direction. These circuits are across relatively open, Mitchell grass downs and include sheep and cattle properties. Parts of his routes appear to be associated with major creek lines.

Future

In early 2008 we will redeploy 10 satellite collars on wild dogs in the Charleville–Morven area and nine in the Blackall–Idalia National Park area. Environment Protection Agency is funding five Argos GPS collars in the central west.

Much is being discovered in these studies. For example:

- To date only solitary males have dispersed long distances.
- All the wild dogs that have established in new areas have gone to properties just recently baited.
- Most of the wild dog activity along roads during autumn seems to be males.

- During whelping and pup rearing, wild dogs appear to avoid roads—frequented areas as far away from human activity as possible.
- Males and females of all ages are involved in feeding and keep close to pups until the juveniles become independent.

Update on the cyanide ejector

A few years ago we evaluated ejectors for wild dog and fox control. We investigated commercial and food-based attractants for use in ejectors as well as presentation methods, and reported on this in Issues 8–11. We can now report that the predicide ejector registration package is complete.

The registration package supporting the ejector has several volumes of information. Registration aims to show that the product achieves its intended purpose and does not pose any undue hazard to human health, the environment, plants or animals.

The volume on chemistry and manufacture provides information about the active constituent (sodium cyanide) and the product (M-44 Cyanide Capsules) to assess the quality of the active constituent and product.

The volume on toxicology provides data on the toxicity of the active constituent and product to determine potential human health hazards arising from use of the product. From this, first aid and safety instructions are drawn.

The volume on occupational health and safety includes information on operators' potential exposure to M-44 Cyanide Capsules during and after use.

The volume about environment includes information on hazards of the product to the environment. It assesses the risk to the environment from exposure to the cyanide capsules. From this information restrictions on use of the product will be developed.

The volume on efficacy discusses the effectiveness of the product for its intended purpose when it is used according to label directions. The package includes a proposed label for the product, which outlines situations for the capsules use (including safety and first aid instructions).



The APVMA registration package for cyanide ejectors



Dogs destroyed with cyanide ejectors during trials in south-west Queensland in 2000.

Desert Knowledge Cooperative Research Centre launches project to develop a feral camel management plan

There may be as many as one million feral camels in Australia, with the population estimated to double every eight years. Camels have a significant impact on production, environmental and cultural values across central Australia.

Because camels occur widely in arid Australia and are mobile animals, effective management requires a national approach. To achieve this objective, the Desert Knowledge Cooperative Research Centre (DKCRC) has sought funding from the National Heritage Trust for the Cross-jurisdictional Management of Feral Camels to Protect Natural Resource Management and Cultural Values Project.

The three-year project has four aims:

1. Survey people's perspectives on feral camels and their management.
2. Evaluate the impact of feral camels.
3. Assess the feasibility of commercial use of feral camels, including pet meat, and determine the role commercial use might play in overall management of feral camels.

4. Assess non-commercial approaches to camel management, including culling and fencing key assets.

The project will develop a practical management plan with acceptable control options and a business case for investment in camel management.

The DKCRC is working with 13 partners through a nationwide network to deliver this project, including a Steering Committee representing government, NRM boards, the camel industry, the pastoral industry and Aboriginal land owners. The committee met recently in Perth to discuss progress and hold discussions with key camel interest groups in Western Australia.

For more information, please contact the Project leader:
Glenn Edwards
Principal Scientist, Biodiversity Conservation
Department of Natural Resources, Environment and the Arts
PO Box 1120 Alice Springs, NT 0871
Ph: (08) 8951 8239
Fax: (08) 8955 5190
Email: glen.edwards@nt.gov.au

Vertebrate pest management planning and control training

The Queensland Murray–Darling Committee (QMDC) together with shire councils and Biosecurity Queensland has prepared a training course to develop skills in the planning, management and control of vertebrate pest animals. The train-the-trainer program will give council staff, trappers and students a recognised qualification. The training program meets minimum industry requirements and standards.

The two-day course can be run over several weeks. The day-one workshop develops a property and area-wide pest management plan, targeting hot spots within the shires. The aim is to encourage full participation, adequate resourcing and ensure more effective on-ground activities.

Day two develops 'hands-on' skills in control techniques that include trapping, baiting and shooting. Relevant legislation and planning tools are included.

Training sessions target local needs, depending on the pest priorities and audience. The needs and hot spots of each shire are first determined with the shire and other stakeholders and delivery is via the QMDC Sub-Catchment Planning process.

While training was not developed specifically for wild dogs, QMDC will explore this in conjunction with the broader integrated pest control.

For more information contact Liz Otto, QMDC, St George. lizo@qmdc.org.au

Hear from you

For further information contact:

Lee Allen
Biosecurity Queensland
Department of Primary Industries and Fisheries
PO Box 102
Toowoomba Q 4350
Telephone (07) 4688 1397
Email Lee.Allen@dpi.qld.gov.au



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