Local Land Services cross border pest animal aerial control program case study 2021

The Problem

Feral pigs cost landholders across the North West and Northern Tablelands regions millions of dollars annually in lost production of crops and pastures. They also pose a disease risk to livestock and humans, as carriers of Leptospirosis (*L. pomona*) and Brucellosis (*Brucella suis*).

In this area specifically, landholders have seen feral pig populations explode over the last two years as populations recover from the effects of drought in the area. Water availability has increased, and feed supplies are abundant across the area.

The target area, from Delungra to the Queensland border, was very diverse, from steep gorge country through to open cropping country. Feral pigs are widespread and abundant across the area, with deer populations encroaching into the area becoming larger in pockets.

Landholders within this area are generally proactive with their feral pig control programs. They use 1080 feral pig bait sporadically, as well as run trapping programs ad hoc to compliment their private aerial control programs. This cross border program was conducted on the back of several landholder organised and funded aerial control programs.

The Program

A coordinated aerial control program was instigated in the area to compliment existing on-ground control programs. A broadscale approach to strategically include key areas was adopted to maximise the effectiveness of the program.

Almost 293,000 Ha was covered in the program, totalling 337 holdings of both private and publicly managed land from just south of Delungra north to the Queensland border east of Boggabilla. National Parks and Wildlife Services and travelling stock reserves were key participants in this program.

Every participating landholder signed a consent form permitting aerial control to occur on their holding. Landholders were asked to highlight any potential hazards and no fly zones to ensure the program didn't interfere with normal farm business.

Logistically, this program was huge. Daily updates were sent to participants advising of the day's results and plans for the following day's flights. A map of the completed program was circulated to those involved showing the scale and results. Being able to see where the activity and where the pigs were shot was seen as a great asset and created plenty of discussion.

NSW GOVERNMENT

Program results snapshot - number of pest animals culled

Feral pigs
5,321

Feral goats
318

Foxes
48

Deer
6

Feral cats
5

There was very little resistance in participation from landholders within the target area, demonstrating the scale of the problem and the need for a coordinated approach.

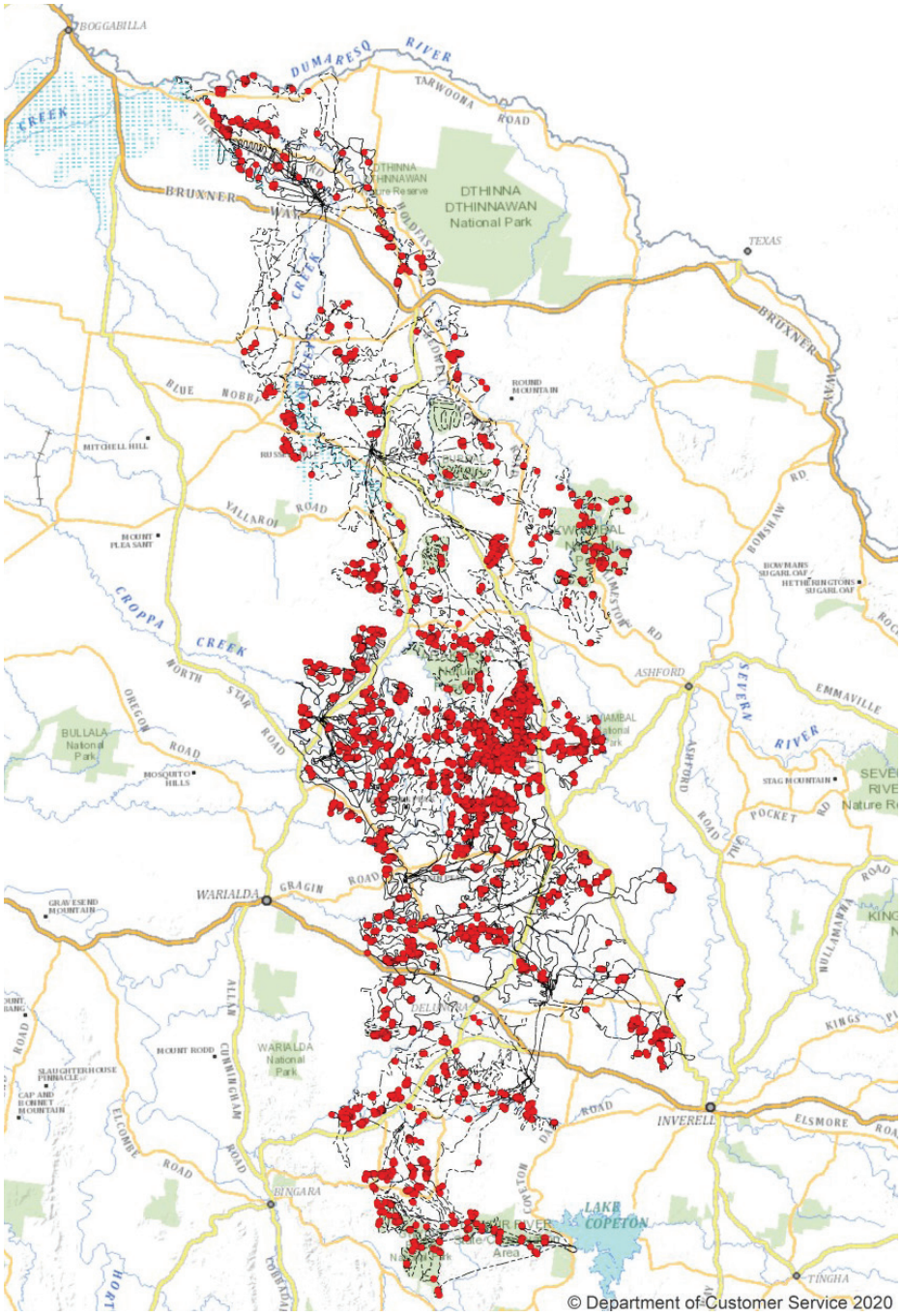
For fatigue management of the flight crew, eight hours of flying was scheduled as this is the limit allowable for a pilot per day for Feral Animal Aerial Shooting Team (FAAST) operations. The crew consisted of a pilot, a spotter and a shooter seated behind the pilot. There was a steady rotation of shooters and spotters to ensure ultimate safety and concentration. FAAST accredited shooters were used for the program, with limits of six hours of flight permitted per shooter. The FAAST is a training program for Local Land Services and National Parks and Wildlife Services aerial shooting staff.

The program removed a significant number of feral pigs from a very large target area. This will have a flow on effect to local landholders, who should notice a real reduction in numbers and impacts. The recent conditions have been favourable for feral pig population growth and this was observed through the high numbers of sows with slips at foot. It was noted from the air crew that there were also many heavily pregnant sows culled, removing the next generation.

Crop damage was observed during the programs, particularly on the fringes of cereal crops near pockets of cover and water.

The temperature impacts on where feral pigs are in the landscape. For this reason helicopter runs in the cooler parts of the day found feral pigs in crops and more open areas. Whereas, warmer temperatures pushed the feral pigs towards cover and water and this is where the majority were targeted at the peak of the heat.

Every flight path and target species culled are recorded using GPS waypoints, enabling almost real time data to be viewed by the coordinating team.



Next steps

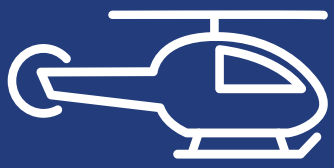
This aerial program is by no means the end point for feral pig control in this area. Rather it has provided a good starting point for landholders to take control and continue the effort.

The key now is for landholders to continue their on-ground efforts to further suppress the population.

There are several control tools available for feral pigs and integrated programs are always more effective. Both Northern Tablelands and North West Local Land Services can support landholders in coordinating group programs to improve effectiveness.

Landholder testimonials/comments

> "The large number of pigs that were culled shows the benefit of having a large coordinated programme covering a large area at one time. I hope that we can be involved in any future programmes that might help control the growing problem.
>
> Thanks again for including us in this great scheme."
>
> - Ben



Helicopter flight time

152.9 hrs

Helicopter costs

$213,295.50

Total holdings

337

98 NWLLS
239 NTLLS

Total Ha

292,885.57