

FOXES ON TRIAL

Recent Fox Research Results

Timing of Baiting

Presented below in Figure 1 is a model to simulate the dynamics of a fox population (McLeod, S., Twigg, L. and Saunders, G. (2004). *Final Report. Modelling sterility agents for foxes and rabbits.* Australian Wool Innovation Ltd.).

'The timing of an annual baiting campaign has major effects on fox density'

- If no control is imposed on the modelled fox population the density remains steady between years whilst in any one year there is a spike in the breeding season followed by a slow decline until the next breeding season ('No Control').
- The timing of an annual baiting campaign has major effects on fox density with a winter campaign ('July only') reducing overall densities more than just an autumn campaign ('April only').
- In an autumn-controlled area fox numbers are boosted by late immigrants and a reasonable breeding season can still occur, whereas after a winter control, what breeding occurs is left to the few surviving individuals as immigration at this time is low. However this poor breeding season can be compensated for by increased immigration during the next autumn.
- By combining an autumn and a winter campaign ('April & July') fox densities can be kept low all year round by curtailing immigration into areas that had reduced breeding due to winter baiting

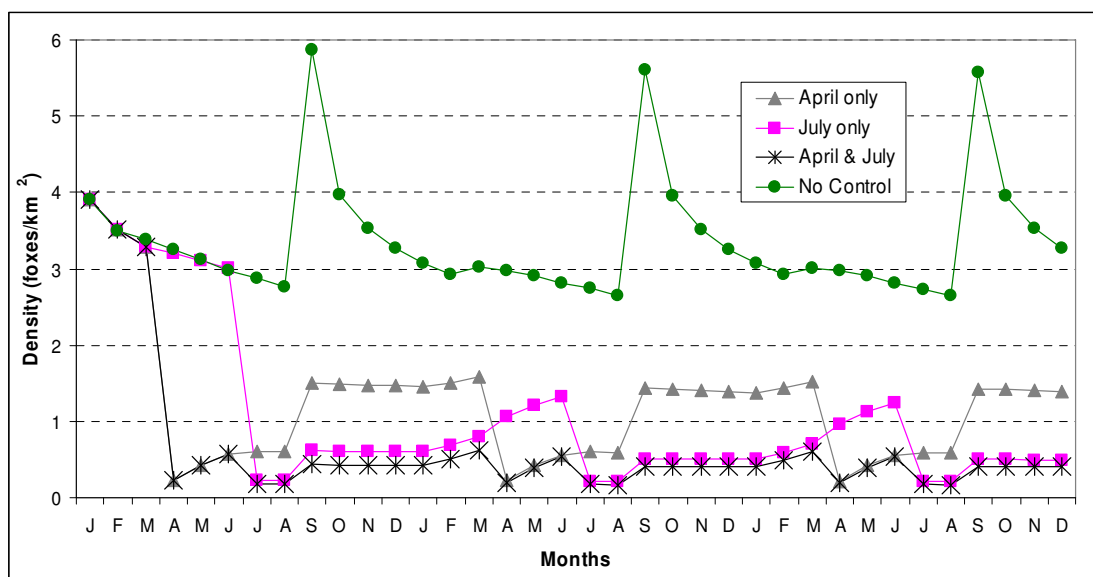


Figure 1: Projection of a fox population subject to varying 1080 baiting control campaigns (carrying capacity 5 foxes/km², sex ratio 1:1, all reproductively active females give birth, bait density 10 baits/km², assume 80% of foxes take bait).

FOXES ON TRIAL

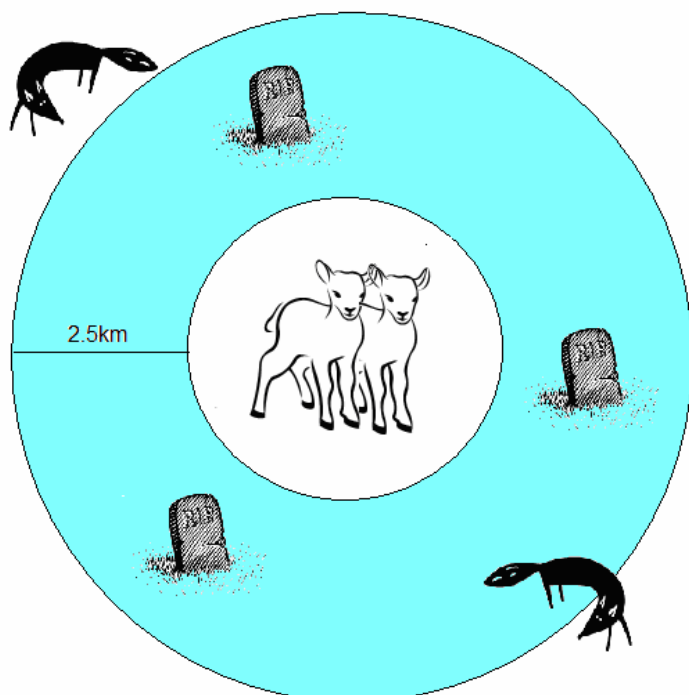
Recent Fox Research Results

Baiting Area

A recent study conducted by NSW DPI collected lambing and fox control data from across four Rural Lands Protection Boards in central Western NSW over three years (2003 – 05). One of the aims of the project was to see if lambing percentages were affected by the fox baiting effort in the surrounding area.

Results show that the baiting done by your near neighbours (within a 2.5 km radius) can significantly affect the outcome of your lambing. As the proportion of these neighbours who bait prior to your lambing increases, so to does your lamb survival.

Results also showed that if either yourself or your near neighbours baited twice a year approximately six months apart, your lamb survival was also significantly enhanced.



Key Message

If you and your neighbours can coordinate two fox baiting programs a year, approximately six months apart, you can benefit with significant increases in your lambing percentages