

Foxes and their impact on agriculture



Image: Dion Thompson

European foxes can have significant impact on livestock through predation, competition, and the spread of disease. They are also one of the most damaging invasive animal species to native wildlife in Australia. Because of this, foxes are declared as a pest across Australia.

What are the agricultural impacts?

Foxes kill and injure livestock, transmit diseases such as hydatids, distemper, parvovirus and mange, chew and eat fruit such as grapes and stone fruit, spread weeds and damage infrastructure e.g. by chewing irrigation pipes and damaging netting. Predation by foxes is the biggest of these impacts to Australian agriculture, particularly to lambs, kid goats and poultry. Foxes are known to surplus kill (kill and injure more than they can eat), leading to more livestock deaths than the fox population may suggest.



Image: Rhett Robinson

“To put this in perspective, at four foxes per km², this is a total of 1,250 foxes in a 10km radius of your farm shed.”

The average number of lambs killed by foxes in Australia each year is estimated to be 7%. In certain areas, foxes can cause the loss of more than 10–30% of lambs. When in high densities, foxes might also lead to ewe mismothering lambs due to stress, fear and disruption.

Infrastructure damage can be costly to producers such as grape and olive growers. One farmer has estimated the cost of irrigation damage on their 90ha olive plantation to be over \$100k/year due to tree stress and lost fruit.

Fox densities

Density estimates change widely across their range and can fluctuate in response to rainfall and food availability. For example, densities vary between 0.9 foxes per km² in dry arid areas, 1.2 to 8 per km² in fragmented agricultural systems and 16 per km² in our large cities. To put this in perspective, at 4 foxes per km², this is a total of 1,250 foxes in a 10km radius of your farm shed. Highest densities occur where there is plenty of food, such as lambing paddocks.

Home ranges can be large, and both young foxes and adults can disperse long distances. Such movements can result in quick recolonisation of areas where foxes have been removed.

Who is impacted?

Foxes are generalists with few specific habitat or dietary requirements and are both hunters and scavengers. Foxes are found in all mainland states and territories, except the far north. They have also been sporadically detected in Tasmania.

The injury and death of animals and the spread of disease, have both physical and mental health impacts on humans, particularly sheep farmers. Foxes also create a general nuisance by damaging infrastructure, raiding rubbish bins, eating pet and other food as well as stealing shoes and other belongings. Some of the densest populations are found in human-dominated habitats such as urban areas and agricultural landscapes. Domestic pets are also at risk of being killed and injured by foxes.

The environmental damage and significant loss of birds, lizards, turtles and small mammals associated with foxes is also of concern to many people, leading to a desire to manage numbers, even if they are not impacting agricultural productivity.

Are foxes causing an impact?

Foxes mostly hunt at night and are elusive, so just because you don't see them, doesn't mean they are not there. You may need to rely on other signs such as:

- they have been seen or heard in your area
- fox footprints or scats have been found
- livestock or wildlife killed or damaged
- unexpected losses of lambs, kid goats, poultry
- FeralScan reports.

What can you do?

Effective fox control programs rely on using as many tools as possible in a coordinated and integrated way across a broad area. Because foxes have a high reproduction rate and are

“The injury and death of animals and the spread of disease, have physical and mental health impacts on humans, particularly sheep farmers.”

Check out FoxScan



FoxScan is a free resource for landholders, Landcare groups, community groups, local Councils, professional pest controllers and biosecurity groups to map, monitor and report on fox activity including predation, sightings and control activities.

Find out more:
www.feralscan.org.au/foxscan

known to be able to travel long distances, ongoing management is vital to keep populations low, reduce chances of re-invasion and keep impacts to an acceptable level. You will need to remove an average of 67% of the population, just to counter fox breeding success. This will vary depending on food availability.

There are a range of tools available that can help you to control fox populations and manage their impacts. A targeted, well planned baiting program with secondary control techniques such as trapping, shooting or guardian animals is proven to be the most effective. Work with your neighbours for the best outcomes.

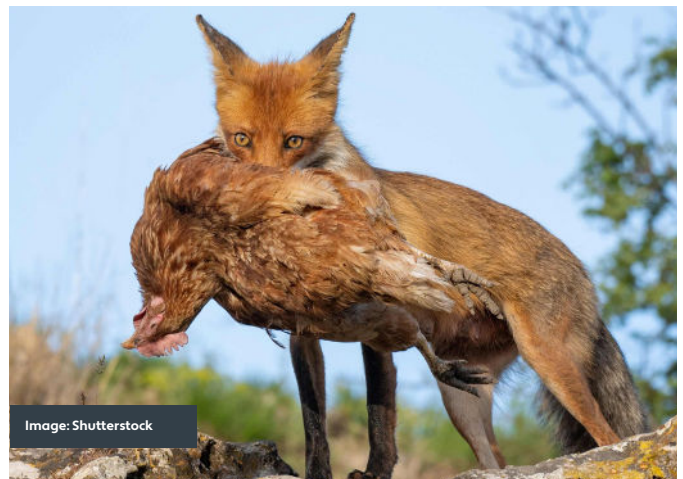


Image: Shutterstock

More information

Visit feralcatandfox.com.au for more information on foxes and how to manage them on your property.

Note: The National Feral Cat and Fox Management Coordination Program is funded by the Australian Government via the Centre for Invasive Species Solutions.