

Can recreational hunting control feral deer?

Recreational hunting alone will not solve Australia's feral deer problem.

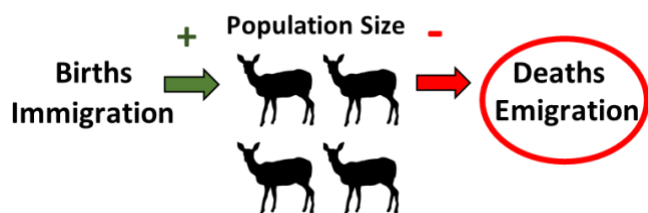
Recreational hunting is often touted as a cheap and simple option for controlling overly large deer populations. However, **hunting alone is not enough.**

Recreational hunting does remove some deer from the population. However, each year there are **more deer being born than the number of deer recreational hunters can kill.** This allows the population to keep growing.

Population dynamics: how to shrink populations

A population grows when births and immigration are greater than deaths and emigration.

Either removing animals or preventing births can reduce the size of a population.



For animals that live a long time and have one offspring at a time, like fallow deer, the best way to reduce population size is to remove animals.

More animals need to be removed than are born (or released) every year to drive to population down.

How to reduce fallow deer populations

If the conditions are right for fallow deer, their population **can grow by more than 35% every year** from new births.

This means that, for fallow deer, each year:

- **If less than 30% of the population is removed, the population will keep growing but at a slower rate.**
 - Fewer animals are being removed than are being born.
- **If around 35% of the population is removed, then the population will stay about the same size.**

- Only the animals being removed are being replaced by the new ones born.

- **If more than 35 - 40% of the population is removed, then the population will start to shrink.**
 - Enough deer are being removed to counter new births each year plus extra deer to reduce the population.

To maintain a reduction in the population size over time, **more than about 35% and potentially up to 80%** of the population needs to be removed **every year.**

Complicating factors

As the population grows smaller, it becomes harder because:

- There are more resources for the remaining animals, who often respond by having more offspring. This causes the birth rate to increase.
- There are fewer animals to find and they are wavier of humans, making them harder to track down.

The most effective way to reduce deer populations

It takes a massive effort to **remove between 35 and 80% of the population each year** for continuous years.

Coordinated programs with clear targets using aerial shooting and professional ground shooting are the most effective and humane way to remove the required proportion of a population.

Recent advances in thermal imaging have further improved the efficiency and welfare outcomes of aerial culling.

Comparing volunteers to professionals

- A study in Australia that compared ground-based volunteer hunters to contract shooters found that **contract shooters killed four times more sambar deer per hour** than did volunteer shooters.
- In the Gum Lagoon Conservation Park in South Australia, 65 recreational hunters over 4 days were only able to kill 44 deer. **One professional shooter in a helicopter was able to kill 182 deer in 4 hours.**
- A study in New Zealand found that **environmental recovery times were up to twice as long when recreational hunting was used** to control deer versus aerial shooting
- In Tasmania, **a single professional shooter** was able to cull as many wallabies as **four recreational shooters.**

Why recreational hunting doesn't reduce populations at a landscape scale

Recreational hunting is just not able to achieve these removal rates for a few reasons.

Recreational hunting doesn't remove many deer across the entire landscape because:

- Hunting occurs during the day when deer are less active.
- Recreational hunters stick to easily accessed places, like areas with roads. Deer quickly learn to avoid these areas.

A single recreational hunter can't kill very many animals in one hunting trip because:

- Limitations on the type of firearms.
- They are on foot so they can't cover large areas.
- Recreational hunters have varying skill levels; some are very skilled but others are not.

Recreational hunters care about different things:

- Hunters often want meat, trophies, and good experiences with their families and friends. Professional shooters spend gruelling hours killing hundreds of animals in a night.
- Recreational hunters want to return to their favourite places and continue finding deer there. Professional shooters want every last deer gone.
- Recreational hunters often target stags and leave does, but to shrink the population, females need to be targeted so they don't have more fawns.

Recreational hunting removes animals haphazardly:

- Coordinate programs are the best way to make sure more than 40% of deer are removed.
- It's difficult to coordinate recreational hunters across huge landscapes

Is there a role for recreational hunting?

Yes, there is. Recreational hunting can support broader control programs in small, accessible areas. Very skilled recreational hunters can support control programs as ground shooters.

Recreational hunting is one of the tools managers can use to control deer populations. However, as a stand-alone method, the evidence is clear: recreational hunting alone is not capable of the significant declines in deer populations that are needed in many areas around Australia.

If you want to get involved further, or find out more about feral deer and what you can do to protect Tasmania, check out the Invasive Species Council website

