

August 2023

Feral pigs - Sus scrofa

Biology, ecology and impacts

Feral pigs are very adaptable and can thrive in most environments.

They have significant impacts on agricultural production and the environment.

Feral pigs are also a host and vector for numerous endemic and exotic diseases and parasites that affect both people and livestock.

Description

Pigs arrived in Australia with the first fleet and were widespread across NSW by the 1880s. Although feral pigs are descendants of various breeds of domestic pigs, they:

- are smaller than domestic pigs
- have more developed shoulders and necks, smaller hindquarters and narrower backs
- have longer larger snouts and tusks
- have hair that is coarser, sparser and longer
- males sometimes have a crest or mane of bristles extending down the middle of their back, which is longer on the neck and shorter near the tail and may stand up when agitated
- usually have straight tails with a bushy tip.



Figure 1. Feral pigs occupy a wide range of habitat types in Australia (Photos: Andrew Bengson, Troy Crittle).

Distribution

In NSW, feral pigs are found in most regions west of the Great Dividing Range, including the tablelands. High densities of feral pigs are found in western NSW floodplains and ephemeral wetlands as well as the northern slopes and plains.

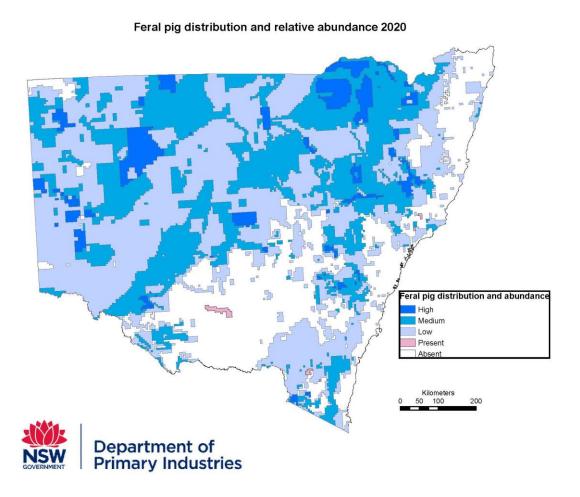


Figure 2. Feral pig distribution and abundance in NSW, 2020.

Diet

Feral pigs are omnivores and have a monogastric digestive system. They will eat succulent green vegetation, meat, fruit, grain, bulbs and corms, and fungi. They can be fussy eaters and will often target specific food sources when they are available.

Ruminant animals, such as cattle, sheep, deer and goats, are more efficient than feral pigs at utilising grasses and other dry vegetation in their diet.

Reproduction

Feral pig breeding is flexible and greatly influenced by the amount and quality of feed available. Sows need a consistent high-protein food source to successfully breed and rear their offspring.

Feral pigs:

- can breed throughout the year
- usually have litters of 4 10 piglets
- reach sexual maturity: for females, when they reach 25-30 kg in weight, between 7 and 12 months of age; and for males, at around 18 months of age.

When abundant high-quality feed is available it:

- reduces the age when females start breeding
- reduces the time between breeding events
- increases litter size and survival rates of young.

When conditions are poor, pigs reduce breeding activity, conserving energy for survival instead of breeding.

When conditions are good, feral pig populations can increase by up to 86% in one year

Social structure

Feral pigs usually form groups where:

- sows and piglets generally remain together
- immature females and males form juvenile groups
- mature males tend to become more solitary, only joining other groups to mate or share a common food source.

Group size depends on the seasonal conditions and habitat:

- in forested areas group size rarely exceeds 12
- in open country up to 40–50 feral pigs may form a group
- during dry times, when food and water is scarce, large groups of 100 or more feral pigs may gather close to a water source.

Home range and movement

Feral pigs are mostly inactive, and they generally do not make regular longdistance movements from one habitat to another.

Feral pigs need regular access to water and shelter as they cannot reduce their body temperature easily. This is especially important when conditions are hot.

The home range size is influenced by:

- habitat and abundance of food sources
- size of individual animals (in general home range size increases with body weight) and population density
- sex: adult males have a larger home range then females.

Feral pigs will often restrict activity to the cooler parts of the day. When temperatures get hot, days may be spent in one area and nights spent feeding in a nearby area.

Very hot conditions may greatly restrict movement, resulting in:

- less feeding
- reduced mating opportunities
- less visibility in the landscape to casual observers.

Lifespan and mortality

Few feral pigs survive longer than five years. Mortality can vary depending on the habitat and seasonal conditions. Starvation affects feral pigs of all ages. Malnutrition can make feral pigs more susceptible to parasites and diseases.

Most piglets will never reach one year of age. They can die due to:

- poor weather conditions
- accidental suffocation by sows
- separation from the sow
- malnutrition and starvation: sows can stop lactating if protein levels in their feed sources is not adequate
- predation.

Impacts

Feral pigs significantly impact agricultural production and the environment.

In agricultural production areas they:

- prey on newborn lambs and goats
- feed on and destroy or trample grain, sugarcane, fruit and vegetable crops
- damage fences
- foul water sources like dams and waterholes by defecating and wallowing in them
- damage pastures by uprooting the ground
- compete with livestock for pasture resources.

Environmental impacts include:

- degradation of natural areas by rooting up soils, native grasses and forest litter
- eating a range of native animals or their eggs, including frogs, lizards, turtles and groundnesting birds
- fouling water sources by trampling, wallowing and defecation in the water
- competing with other animals for food and water resources.

Social impacts include human disease spread, damage-related stress and damage to visual amenity (e.g. rooting up of ground in national parks).

Disease spread

Feral pigs are hosts and vectors of spread for parasites and diseases which can affect other animals and people, including:

- leptospirosis
- porcine brucellosis
- melioidosis
- tuberculosis
- sparganosis
- porcine parvovirus
- Murray Valley encephalitis and other arboviruses.

Feral pigs are susceptible to (or host and/or vector) for several exotic diseases that may enter or are already present in Australia, including:

- African swine fever
- foot and mouth disease
- swine vesicular disease
- Japanese encephalitis.





Figure 3. Feral pig with a sheep carcass on the left and pig rooting damage in pasture on the right (Photos: Peter O'Brien and Andrew Bengsen)

More Information

NSW

NSW Code of Practice and Standard Operating procedures for the Effective and Humane

Management of Feral Pigs:

 $\frac{\text{https://www.dpi.nsw.gov.au/}_\text{data/assets/pdf_file/0008/1394648/Code-of-Practice-and-Standard-Operating-Procedures-for-the-Effective-and-Humane-Management-of-feral-pigs.pdf}{\text{pdf}}$

Local Land Services feral pig advice:

 $\underline{\text{https://www.lls.nsw.gov.au/help-and-advice/pests,-weeds-and-diseases/pest-control/pest-species-control/feral-pigs}$

Regional Strategic Pest Animal Management Plans:

 $\underline{\text{https://www.lls.nsw.gov.au/help-and-advice/pests,-weeds-and-diseases/pest-control/pest-species-}}{\text{control}}$

National

PestSMART:

https://pestsmart.org.au/

National Feral Pig Action Plan:

https://feralpigs.com.au/the-plan/

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