

## Feral cat (Felis catus)

Biology & ecology: Feral cats live, hunt and reproduce in the wild. They are the same species as domestic cats but differ in how and where they live rather than any true biological differences. Feral cats have the body shape, acute senses and fine coordination perfectly suited for stalking and capturing prey. Feral cats can take down prey matching their own body size and kill by biting the throat or base of the skull. These traits have allowed feral cats to adapt to some of Australia's harshest conditions and invade almost all parts of the continent.

Feral cats weigh about 3-4 kg, with body lengths ranging from 40-60 cm. Males are usually larger than females. Most feral cats are short haired and not showy breeds like siamese or persian. Coat colours range between ginger, tabby, tortoiseshell, grey and black. In Australia, tabby and ginger cats are the most abundant, while fully white cats are rare<sup>1</sup>.

Cats will range widely to prey on a variety of wildlife species including birds, rodents, lizards and rabbits.

Gerhold, 2011 (The Wildlife Society)9.

**Habitat:** Feral cats live in a diverse range of habitats including deserts, forests, woodlands and grasslands. They usually reach their highest densities on small islands or in human-modified habitats such as farms and rubbish tips. However, most of the time they are found in low numbers with relatively large home ranges (may exceed 10 km²). The distance travelled by ranging cats depends on the availability of prey, breeding season of the cat and habitat. Males tend to roam over larger

range sizes than female cats. Feral cats are generally nocturnal and will rest during the day in den sites such as hollow logs, piles of debris, rabbit warrens or dense scrub.



Image: Mick Davis

**Nutrition:** Feral cats are true carnivores, meaning they survive solely on the nutrients found in animal flesh. In Australia they mainly eat small native and exotic mammals — rabbits being a major target when available — but also birds, lizards and insects. Cats need large amounts of fresh meat to survive and reproduce, and inadequate diet is a major factor that regulates feral cat populations. They prefer live prey, but will scavenge for carrion when live food is scarce.

Reproduction & lifecycle: Female cats can reproduce at 10-12 months of age, with males reaching maturity at about one year. Cats generally do not breed during winter. Longer breeding periods have been noted in drier, warmer areas compared to cooler wetter places. They produce up to three litters a year (65 days gestation) averaging four kittens per litter. Kittens are weak hunters and can take up to six months to become independent. Kittens and juveniles are often killed by foxes, dingoes, reptiles and wedge-tailed eagles.

Female feral cats are likely to reproduce for all of their adult lives. This high reproductive ability keeps populations growing, despite the high death rates of young. Feral cat populations do not need a supply of new domestic or stray cats to maintain their numbers.





## Biological & behavioural weaknesses:

Feral cats — especially young ones — are vulnerable to predation and competition. Feral cat populations in Australia may be suppressed by top-order predators such as dingoes and foxes<sup>2</sup>.

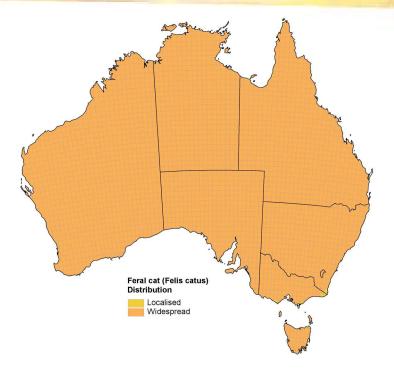
Cats are susceptible to toxins such as cyanide, sodium monofluoroacetate (1080), and the methaemoglobin-forming compound para-aminopropiophenone (PAPP)<sup>3</sup>. Although naturally wary, cats may eat foreign substances presented in pea-sized hard-shelled pellets or through the normal activity of grooming, behaviours that may be exploited for cat control.

**Original distribution:** Feral and domestic cats are descended from wildcats (*Felis silvestris*) native to Eurasia and Africa. Cats share a long history of association with humans that has helped their spread across the globe. Archaeological evidence of cat taming dates back about 9500 years ago to Crete. Today, cats can be found on every continent except the poles.

**Current Australian distribution:** Cats probably first arrived in Australia as pets of European settlers during the 18th century, and were later deliberately introduced in an attempt to control rabbits and rodents. Cats now occupy 99% of Australia, including many offshore islands<sup>4</sup>. Data on feral cat numbers is difficult to collect and total population estimates for Australia vary considerably, ranging from five million up to 18 million<sup>5</sup>.

**Economic impacts:** Feral cats have no obvious positive economic value. The cost of feral cats due to management and research has been estimated at \$2 million per year. The loss inflicted by feral and domestic cats, based on bird predation alone, has been estimated at \$144 million annually<sup>6</sup>.

Environmental impacts: Feral cats are exceptional hunters and pose a significant threat to the survival of many native species including small mammals, birds and reptiles. Feral cats have been implicated in extinctions of Australian native animals and have added to the failure of endangered species reintroduction programs (eg numbat, bilby). About 80 endangered and threatened species are at risk from feral cat predation in Australia according to Australia's Environment Protection & Biodiversity Conservation Act (1999) and threat abatement plan (2008)<sup>7</sup>.



**Social impacts:** Feral cats pose a serious health risk to humans, livestock and native animals as carriers of diseases such as toxoplasmosis and sarcosporidiosis. Cat-related toxoplasmosis can cause debilitation, miscarriage and congenital birth defects in humans and other animals<sup>8,9</sup>. Feral cats also represent a highrisk reservoir for exotic diseases such as rabies if an outbreak were to occur in Australia.

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