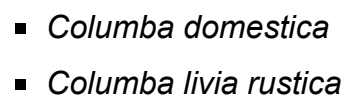


Despite this, city pigeons today are seen as pests, mainly due to their droppings. Feral pigeons are considered invasive in many parts of the world, though they have a positive impact on wild bird populations, serving as an important prey species of birds of prey.<sup>[5]</sup>

## References



## External links

# Domestication

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Pigeons have served key roles as food, pets, holy animals, post carriers and more for thousands of years. The earliest recorded mention of pigeons comes from Mesopotamia some 5,000 years ago. Ancient Egyptians kept vast quantities of them, and would sacrifice tens of thousands at a time for ritual purposes. Akbar the Great travelled with a coterie of thousands of pigeons. They were introduced to the Americas about 400 years ago, as they were not native to the New World. Around the 18th century, interest in fancy pigeons began, and breeders greatly expanded the variety of pigeons.<sup>[6]</sup>

Despite the long history of pigeons, little is known about their initial domestication. Which subspecies of *C. livia* was the progenitor of domestics, exactly when, how many times, where and how they were domesticated, and how they spread, remains unknown. Their fragile bones and similarity to wild birds make the fossil record a poor tool for their study. Thus most of what is known comes from written accounts, which almost certainly do not cover the first stages of domestication. Because domestic and feral pigeons have extensively interbred with wild pigeons, wild-type pigeons may not truly exist anymore, or are nearly extinct. This frequent breeding further muddies the true origins of pigeons.<sup>[6]</sup>

From a genetic perspective, there are two loose ancestral clades of pigeons, but there is striking genetic homogeneity due to frequent interbreeding and human directed cross-breeding. The first ancestral clade contains pigeons with exaggerated crops, tails, and manes; the second contains tumblers (the most diverse group), homing pigeons, owl pigeons, and those with exaggerated wattles.<sup>[6]</sup>

## Reproduction

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Domestic pigeons reproduce exactly as wild rock pigeons, but may include human interventions. Generally humans will select breeding partners. Crop milk or pigeon milk produced by both male and female parent birds may occasionally be replaced with artificial substitutes. Pigeons are extremely protective of their eggs, and in some cases will go to severe lengths to protect their productive eggs and have been known to seek revenge on those who interfere with their productive process. Baby pigeons are called *squeakers* or *squabs*.<sup>[7]</sup>

## Pigeon breeding

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### For food

Pigeons bred for meat are generally called squab and harvested from young birds. Pigeons grow to a very large size in the nest before they are fledged and able to fly, and in this stage of their development (when they are called squabs) they are prized as food. For commercial meat production a breed of large white pigeon, the King pigeon, has been developed by selective breeding. Breeds of pigeons developed for their meat are collectively known as utility pigeons.

### Homing pigeons

Trained domestic pigeons are able to return to the home loft if released at a location that they have never visited before and that may be up to 1,000 km (620 mi) away. This ability a pigeon has to return home from a strange location necessitates two sorts of information. The first, called "map sense" is their geographic location. The second, "compass sense" is the bearing they need to fly from their new location in order to reach their home. Both of these senses, however, respond to a number of different cues in different situations. The most popular conception of how pigeons are able to do this is that they are able to sense the Earth's magnetic field<sup>[8][9][10]</sup> with tiny magnetic tissues in their head (magnetoception). Another theory is that pigeons have compass sense, which uses the position of the sun, along with an internal clock, to work out direction. However, studies have shown that if magnetic disruption or clock changes disrupt these senses, the pigeon can still manage to get home. The variability in the effects of manipulations to these sense of the pigeons indicates that there is more than one cue on which navigation is based and that map sense appears to rely on a comparison of available cues<sup>[11]</sup>

A special breed, called homing pigeons, has been developed through selective breeding to carry messages, and members of this variety of pigeon are still being used in the sport of pigeon racing and the white release dove ceremony at weddings and funerals.

Other potential cues used include:

- The use of a sun compass<sup>[12]</sup>
- Nocturnal navigation by stars<sup>[13]</sup>
- Visual landmark map<sup>[14][15]</sup>
- Navigation by infrasound map<sup>[16]</sup>
- Polarised light compass<sup>[17]</sup>
- Olfactory stimuli<sup>[18]</sup> (see also olfactory navigation)

## Exhibition breeds

Pigeon fanciers developed many exotic forms of pigeon. These are generally classed as fancy pigeons. Fanciers compete against each other at exhibitions or shows and the different forms or breeds are judged to a standard to decide who has the best bird. Among those breeds are the English carrier pigeons, a variety of pigeon with wattles and a unique, almost vertical, stance (pictures (<https://web.archive.org/web/20071210183002/http://members.aol.com/duiven/highlight/carrier/carrier.htm>)). There are many ornamental breeds of pigeons, including the "Duchess" breed, which has as a prominent characteristic feet that are completely covered by a sort of fan of feathers. The fantail pigeons are also very ornamental with their fan-shaped tail feathers.



Homing pigeon



Dovecote at Nymans Gardens, West Sussex, England



18-day-old pigeon in its nest and one egg

## Flying/Sporting

Pigeons are also kept by enthusiasts for the enjoyment of Flying/Sporting competitions. Breeds such as tipplers are flown in endurance contests by their owners.

## Experimentation

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Domestic pigeons are also commonly used in laboratory experiments in biology, and to test several medicines on them and cognitive science.

## Cognitive science

Pigeons have been trained to distinguish between cubist and impressionist paintings, for instance. In Project Sea Hunt, a US coast guard search and rescue project in the 1970s/1980s, pigeons were shown to be more effective than humans in spotting shipwreck victims at sea.<sup>[19]</sup> Research in pigeons is widespread, encompassing shape and texture perception, exemplar and prototype memory, category-based and associative concepts, and many more unlisted here (see pigeon intelligence).

Pigeons are able to acquire orthographic processing skills,<sup>[20]</sup> which form part of the ability to read, and basic numerical skills equivalent to those shown in primates.<sup>[21]</sup>

## Illegal predator killing by enthusiasts

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In the United States, some pigeon keepers illegally trap and kill hawks and falcons to protect their pigeons.<sup>[22]</sup> In American pigeon-related organizations, some enthusiasts have openly shared their experiences of killing hawks and falcons, although this is frowned upon by the majority of fanciers. None of the major clubs condone this practice. It is estimated that almost 1,000 birds of prey have been killed in Oregon and Washington, and that 1,000–2,000 are killed in southern California annually. In June 2007, three Oregon men were indicted with misdemeanour violations of the Migratory Bird Treaty Act for killing birds of prey. Seven Californians and a Texan were also charged in the case.

In the West Midlands region of the United Kingdom pigeon fanciers have been blamed for a trap campaign to kill peregrine falcons. Eight illegal spring-loaded traps were found close to peregrine nests and at least one of the protected birds died. The steel traps are thought to have been set as part of a "concerted campaign" to kill as many of the birds as possible in the West Midlands.<sup>[23]</sup>

## Pigeon related illness

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Pigeon breeders sometimes suffer from an ailment known as *bird fancier's lung* or *pigeon lung*. A form of hypersensitivity pneumonitis, pigeon lung is caused by the inhalation of the avian proteins found in feathers and dung. It can sometimes be combated by wearing a filtered mask.<sup>[24]</sup> Other pigeon related pathogens causing lung disease are *Chlamydophila psittaci* (which causes psittacosis), *Histoplasma capsulatum* (which causes histoplasmosis) and *Cryptococcus neoformans*, which causes cryptococcosis.

## Feral pigeons

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Group of pigeons



Domestic pigeons in flight



Many domestic birds have escaped or been released over the years, and have given rise to the feral pigeon. These show a variety of plumages, although some look very much like pure rock pigeons. The scarcity of the pure wild species is partly due to interbreeding with feral birds. Domestic pigeons can often be distinguished from feral pigeons because they usually have a metal or plastic band around one (sometimes both) legs which shows, by a number on it, that they are registered to an owner.<sup>[25]</sup>

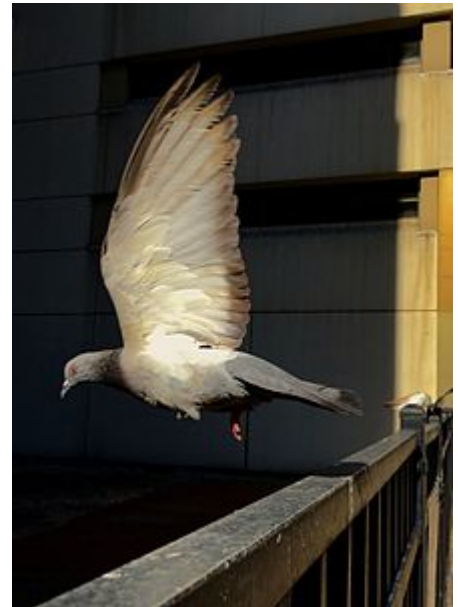
Feral pigeons bear striking genetic resemblance to homing pigeons, supporting the idea that most feral pigeons trace their origins to homing pigeons who did not find their way home, or were otherwise sired by homing pigeons.<sup>[6]</sup>

## See also

- Doves as symbols
- List of pigeon breeds
- Colors of pigeon

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Chicago-native *Columba livia domestica* in flight.



Feral rock pigeons commonly show a very wide range of plumage variation.

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## External links

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- [National Pigeon Association \(USA\)](http://www.npaua.com/) (<http://www.npaua.com/>)
  - [National Pigeon Association \(Great Britain\)](http://www.nationalpigeonassociation.co.uk/) (<http://www.nationalpigeonassociation.co.uk/>)
  - [The Canadian Pigeon Fanciers Association](http://www.pigeonfanciers.ca/) (<http://www.pigeonfanciers.ca/>)
  - [Domestic Pigeons Explained \(Pigeonpedia\)](https://pigeonpedia.com/domestic-pigeons/) (<https://pigeonpedia.com/domestic-pigeons/>)
  - <https://pigeoncarecenter.blogspot.com/?m=1>
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