

Streptopelia decaocto (Eurasian Collared Dove)

Family: Columbidae (Pigeons and Doves)

Order: Columbiformes (Pigeons, Doves and Dodos)

Class: Aves (Birds)



Fig. 1. Eurasian collared dove, *Streptopelia decaocto*.

[https://www.allaboutbirds.org/guide/Eurasian_Collared-Dove/id, downloaded 1 November 2016]

TRAITS. Eurasian collared doves are monomorphic which means that there are no visible differences between the sexes, although males have slightly longer bills (Poling and Hayslette, 2006). They are medium-sized doves with a broad, squared tail with a white edge. The coverts or feathers covering underneath the tail are grey, with a white and black pattern. Behind their necks is a narrow black collar with a white border (Fig. 1). The feathers on the head and breast have a pink hue, they have deep red irises and dark red feet and legs. Juveniles do not have a complete collar behind their neck until they reach around three months old, and they have pale red lines on the feathers of their breast, back and wings (Global Invasive Species Database, 2008).

ECOLOGY. Native to India, these doves invaded Europe in the early 20th century, followed by the Union of Soviet Social Republics (USSR) and adjacent countries. They were introduced to the Bahamas in the mid-1970s and they then invaded other Caribbean islands and the United States of America, rapidly spreading throughout the continent. The collared dove is not found in forested areas and areas with intense agriculture, but in more developed, settled areas with human activity and areas without intense agricultural activity. The reasons for their wide dispersal are not fully understood, but they inhabit a variety of climatic conditions (Scheidt and Hurlbert, 2014). *Streptopelia decaocto* is a very social species that lives in large flocks of up to 115 doves. They expand their range at a rate of a few kilometres per year (Bendjoudi et al., 2015).

ACTIVITY. Collared doves are diurnal animals. They collect grasses and twigs to form their nests at heights of 1m and above (Tinajera and Rodriguez-Estrella, 2014). Migration occurs after the first month post-fledging in order to find more suitable habitats (Eraud et al., 2011). The collared dove, being an invasive species, has been found to compete with other species of birds for their nests, for example American robins *Turdus migratorius*. Within the space of two days, the pair of doves that wish to breed wait until the bird leaves its nest then occupy the nest. The doves increase the frequency of visiting the nest and chase away the bird by landing on a branch next to the nest and show threatening behaviour by puffing their chests and flapping their wings rapidly (Kasner and Pyeatt, 2016).

FORAGING BEHAVIOUR. The collared dove is a granivorous species, which means that their diet consists of seeds, including millet and corn. In situations where their diet overlapped with that of other species of bird that were smaller in size, they showed dominance over the smaller birds by behaving aggressively towards them (Poling and Hayslette, 2006). Foraging occurs in surrounding agricultural fields as well as in areas with human activity. The doves depend on refuse in barns, spilled grains from animal feed and crops in surrounding agricultural fields as a source of food throughout the year (Tinajera and Rodriguez-Estrella, 2014).

COMMUNICATION. Differences in vocalisations were found between the sexes. Structurally, the female syrinx is a reduced version of the male syrinx. Females are not very vocally active. The coos made by females have a higher frequency, lower volume, are short and less frequent, and less stereotyped than males. The major function of female vocalisation is for sex recognition. An increase in testosterone levels has been found to increase vocalisation in females. Males use their perch-coo call to attract potential mates, as well as to defend their territories. Their perch-coos have a lower frequency, louder sound and are much more stereotyped (Ballintijn and Cate, 1997).

SEXUAL BEHAVIOUR. The breeding season for the collared dove is from March to mid-July. However, the male dove engages in courtship displays such as singing early in the morning outside of the breeding season, especially during periods of time with a lot of rain, and even during autumn (Bendjoudi et al., 2015). Reproduction is oviparous, which means that eggs are laid and the young develop outside of the mother's body, with only one or two eggs being laid at a time. Both mother and father contribute to feeding their young (Tinajera and Rodriguez-Estrella, 2014).

JUVENILE BEHAVIOUR. After the first month post-fledging, the young travel short distances and tend to stay close to their nests. The distance travelled and the time spent away from the nest depend on their body condition. The young collared doves become independent from their parents during this time period, during which the parents also stop feeding them. The main cause of mortality of the young is predation. During the dependency phase the attention of predators is caught by their begging in the form of shivering their wings and chasing their parents (Eraud et al., 2011).

ANTIPREDATOR BEHAVIOUR. The major predator on the collared dove is the domesticated cat, especially on juvenile doves and post-fledglings in poor condition which prevents them from flying far from their nests (Eraud et al., 2011). On the Red List of Threatened Species, *Streptopelia decaocto* is ranked as a species of Least Concern due to its large range of habitats, large population size and increasing population growth rate (IUCN, 2016).

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