

# Operation Turtle Dove in Kent

## *Streptopelia turtur*

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### **What is Operation Turtle Dove?**

Operation Turtle Dove (OTD), launched in 2012 is a project which aims to reverse the decline of one of England's best loved farmland birds, the Turtle Dove. OTD is a partnership of four like-minded organisations with the determination to save this iconic species. The project partners are the RSPB, Pensthorpe Conservation Trust, Fair to Nature and Natural England.

### **Why do Turtle Doves need help?**

Turtle Doves are the UK's fastest declining bird species and they are threatened with global extinction (IUCN Red List of Endangered Species).

In the UK, the latest Breeding Bird Survey data shows a 94% fall in breeding abundance between 1995 and 2015 and Turtle Doves have disappeared from more than half of their breeding range occupied in 1970.

Turtle Doves are migratory birds, spending the winter in Africa and spending the spring and summer on their breeding grounds in Europe.

There are four main factors associated with the decline of Turtle Doves. These include the loss of suitable habitat in both the breeding and non-breeding range, unsustainable levels of hunting on migration and disease.

The Operation Turtle Dove team are working hard to understand these threats so that we can develop and deliver conservation solutions.

### **Food shortages on their breeding grounds**

Research points towards the loss of suitable habitat on the UK breeding grounds and the associated food shortages for Turtle Doves being the most important factor driving Turtle Dove decline.

Turtle Doves eat only plant material (mostly seeds) and in the past have relied on seeds from plants associated with arable fields. However, over time these plants have become much scarcer and evidence suggests a lack of available food has shortened their breeding season. It is thought the resultant reduction in nesting attempts could be one of the main drivers of their sharp decline in the UK.

### **Turtle Dove Habitat requirements**

In the UK Turtle Doves are traditionally birds associated with the farmed environment. They feed almost exclusively on seed, favouring the seeds from native plants traditionally found on the farm. Favoured plant species include bird's-foot trefoil, fumitory, clover, and vetch species. These feeding areas need to be relatively short in height and contain about 30-50% bare ground so the birds can access the seed easily.

Feeding areas can be created through cultivated margins and allowing for the natural regeneration of flora already existing in the seedbank (figure 1). This option tends to work very well on lighter soil types. The other way to create forage areas is by sowing a special bespoke Turtle Dove mix. This option is best suited to heavier soils.



*Figure 1: Showing an area of suitable Turtle Dove forage habitat, with native arable plants and areas of bare ground.*



*Figure 1: Showing an area of Turtle Dove nesting habitat of dense thorny scrub.*

Turtle Doves nest in dense vegetation such as mature hedgerows or scrub, 3-4 meters tall and wide, with a preference for thorny species such as hawthorn or blackthorn. The presence of native climbers such as dog rose, old man's beard, or brambles are added bonuses (figure 2).

As their diet consists of seeds, an accessible source of freshwater is essential for Turtle Doves. This can be a pond, ditch or even just a puddle. The key is there needs to be easy access for the birds to get to the water's edge.

As well as advocating natural forage areas, we are also encouraging landowners in TDFZs to provide an OTD prescribed supplementary seed as a practical way of delivering suitable seed to Turtle Doves in the early breeding season (mid-April to June) when natural seed from arable wildflowers is scarce. This involves scattering seed directly on to the ground.

Providing supplementary food for Turtle Doves when they return to the UK in spring will help to ensure adult birds are able to get into good breeding condition and will help to bridge the gap when native wildflower seed is scarce at the start of their breeding season.

Alongside supplementary feed it is important to provide foraging areas of native wild arable plants. Research has shown that native arable plant seeds provide the most nutritional value to Turtle Dove young, when they are growing and developing.

Supplementary feeding trials for Turtle Doves, carried out in 2016 and 2017, have shown that feeding – using the methods and a specific OTD protocol - is effective and safe, with no evidence of increased risk of disease transmission between birds.