



Kent Ornithological Society Turtle Dove Survey 2021



Survey Instructions

Field methods

The survey area will be selected 1km-squares, with the aim of covering all potentially suitable habitat (see below) in the square. Ideally, undertake **two** survey visits during the breeding season, with a minimum of **four weeks** between each visit. The first visit should be carried out between 11th May and 20th June, and the second visit between 21st June and 24th July.

Survey visits should be conducted **between sunrise and 0900 hrs**. After this time, Turtle Dove activity reduces significantly. A survey of a 1km-square should take no more than two hours to complete. If you have been allocated multiple survey squares, please do not survey more than one square on the same morning, unless the squares are adjacent. Avoid days with high winds [Beaufort Force 4 (moderate breeze) and above], continuous rain or fog, as poor weather can both inhibit bird activity, and make detection more difficult.

A separate map should be used for each visit. The survey form should be used to record visit information, details of any turtle doves encountered, and an overall survey summary.

Before the first survey, it may be useful to visit your allocated square to identify/check a suitable survey route, so that all areas of potentially suitable habitat are visited and no suitable habitat is more than 200m from the survey route.

To gain access to all potentially suitable habitat in the square, it may be necessary to gain access to private land. If you are unable to gain access to all areas of potentially suitable habitat in the square, please survey from public rights of way as close as possible to suitable habitat. A purring turtle dove can be heard up to c300m away in suitable conditions.

Recording information

For each visit, record the date, visit number and start/finish times. For each visit, record the bird observations on the accompanying map. **ALL** turtle dove contacts should be marked on each visit **map** using standard BTO symbols (a list of the symbols is included later in these instructions). Where individual birds are known to have moved within a visit, join their sequential locations with a solid line. On the first visit mark the locations of the first record on the map as A, the second as B, etc; on the second visit map ensure that the record codes correspond to those from the first visit.

Record **ALL** turtle dove contacts on the **survey form**, using the same record codes as on the **survey map**. After each visit, on the **survey form** please complete the 'summary of observations' for each record, including the appropriate '**Behaviour code**' (enter more than one, if necessary) and a summary of the activities under '**Other notes**'. Also note the number of birds seen or heard. If possible, include details of where birds are seen feeding. If no observations were recorded for a particular territory on a particular visit, please state this by entering 'nil' in the '**Behaviour codes**' column.

Birds that can be positively identified as juveniles (birds of the current year) should be recorded on the **survey form**, but not included as a territory. In mixed flocks of adults and juveniles, give your best estimate of how many adults were present. Juvenile turtle doves **should** also be recorded on the map.

Record the date of each visit under '**visit details**' against the appropriate visit number, even if no turtle doves were recorded.

Turtle Dove “Hot Spots”

Kent is the most important county for Turtle Doves and there are still areas that have concentrations of breeding birds. It is important to understand why some areas are more important than others and to try and protect such concentrations. It is possible that one of these “hot spots” might occur in one of the selected survey squares.

If five or more territories are located in a square on your first visit, please immediately inform the Operation Turtle Dove team (Nicole.Khan@rspb.org.uk). This will enable someone from the team to visit the square, to perform a detailed habitat assessment and initiate any possible protection measures before the end of the breeding season.

Turtle Doves in adjacent squares

If you see or hear Turtle Doves in an adjacent square whilst doing your survey, please make a note on the recording form in the "Other notes" section in the Summary of Turtle Dove Observations. Take care to separate from any comments made relating to birds recorded in your survey square. PLEASE NOTE THE 1KM SQUARE REFERENCE, number of birds and appropriate BTO breeding code. Please also submit the details to BirdTrack.

Recording other bird species

Although the priority is to record Turtle Doves, it is hoped to gather data on other scarce woodland and farmland birds that may be encountered during survey visits. It would therefore be of great value if surveyors could also record the following target species on the survey form and map: Grey Partridge (P.); Lapwing (L.); Grasshopper Warbler (GH); Nightingale (N.); Spotted Flycatcher (SF); Marsh Tit (MT); Mistle Thrush (M.); Yellow Wagtail (YW); Tree Sparrow (TS); Bullfinch (BF); Linnet (LI); Reed Bunting (RB); Yellowhammer (Y.) and Corn Bunting (CB). All these birds are of conservation interest and may share one or more elements of Turtle Dove breeding season habitat, so may benefit from conservation interventions for Turtle Dove.

Plot the location of every target species seen or heard on the separate **survey map** for each visit, using the standard BTO species followed by a record number for each species, e.g. P.1, P.2, BF1, BF2, etc. Record **ALL** records of the target species on the **survey form**, using the same record codes as on the **survey maps**. After each visit, on the **survey form** please complete a line for each record, in the ‘**other target birds**’ box, including the appropriate ‘**Behaviour code**’ (enter more than one, if necessary). Also note the number of birds seen or heard. The species codes are shown above and on the recording form.

Habitat recording

For each Turtle Dove record, please assess the **primary habitat** roughly 25m around the record using the following **habitat codes** (letter followed by number). Further information can be given in the notes box if the habitat doesn't fit in to the given categories or you wish to provide more details. Record any other important features, e.g. a pond or other waterbodies, around each turtle dove record in the **secondary habitat** box.

Habitat codes and descriptions

A Woodland: 1. Broadleaved 2. Coniferous 3. Mixed (10% each) 4. Broadleaved water-logged 5. Coniferous water-logged 6. Mixed waterlogged

B Scrubland (<6m tall, anything above to be classed as woodland): 1. Regenerating natural or semi natural woodland 2. Chalk downland 3. Heath scrub 4. Young coppice 5. New plantation 6. Clear-felled with or without new saplings 7. other

E Farmland: 1. Improved grassland 2. Unimproved grassland 3. Mixed grass/ tilled land 4. Tilled land 5. Orchard 6. Other farming

F Human sites: 1. Urban 2. Suburban 3. Rural

G Water bodies: 1. Pond (less than 50m²) 2. Small water body (50-450m²) 3. Lake/ unlined reservoir 4. Lined reservoir 5. Gravel/sand pit 6. Stream (<3m wide) 7. River (>3m wide) 8. Ditch with water (<2m wide) 9. Small canal (2-5m wide) 10. Large canal (>5m wide)

J Miscellaneous

Photographs of occupied habitat

It would be of great help if surveyors were able to take photographs of sites where they find Turtle Dove territories (e.g. using a mobile phone), in order to show the habitat in more detail than the use of the habitat codes allows. This is optional and should be done in addition to filling in the habitat details using the codes. Photographs can either be printed and attached to recording forms or sent electronically to the Operation Turtle Dove team (Nicole.Khan@rspb.org.uk), with a note of the date taken and square reference.

Suitable Turtle Dove habitat

Whereas a reduction in suitable seed food is likely to be the key cause of population decline, Turtle Doves also require suitable nesting habitat and accessible water sources within their breeding areas. A recent study found that Turtle Dove territories were more likely to be retained in areas with more nesting and foraging habitat, and with more standing water. Good quality examples of such habitats are described as follows:

Nesting habitat

Most Turtle Doves nest in mature, dense hedgerows and scrub over 4m tall and 4m wide, typically composed of thorny shrub species such as hawthorn and blackthorn. They prefer areas that have further additional cover provided by climbing plants such as wild rose, wild clematis, bramble and honeysuckle. They will sometimes nest in other woody habitats of similar dense structure - e.g. dense thicket-stage conifer plantations. Not all tall scrub or hedgerows are likely to provide suitable nesting habitat - for example willow scrub, or Leyland cypress hedges are unlikely to be used.



Foraging habitat

Turtle Doves feed almost entirely on seeds. Historically, their diet included arable plant species such as stitchwort, fumitory and knotgrass. Turtle Doves are ground feeding birds, taking seeds from areas of short vegetation and bare ground such as fallow areas and farm tracks. They will avoid tall, dense vegetation, even if it does contain suitable seed food. Seed spills in farmyards and game / livestock / wild bird feeding areas are also used, but highly concentrated feeding patches attracting a high density of birds may represent an increased disease transmission risk for turtle doves (and other birds).



Water

Sources of clean, fresh water are important for drinking and bathing. These areas should have shallow sloping sides to allow safe access for Turtle Doves and other species.



Notes on disturbance and confidentiality

Breeding birds and their nest sites should not be disturbed. It is not necessary to find a nest to confirm breeding. Data will be stored securely and only used for appropriate conservation purposes.

Standard BTO symbols to use for Turtle Dove activity

Rather than use the standard BTO code for turtle dove (TD) when mapping the location of contacts, please use the terms A, B, etc to denote each contact, if using a separate map for each visit. [If only using one map, add the visit number after each contact code, e.g. B1, A2, B2 etc.].

- A, 2A Turtle dove sight records with age, or number of birds if appropriate.
 2A♂ means two pairs together.
- A Turtle dove display flight, head bobbing or puffing up feathers in a visual display.
- Ⓐ A purring turtle dove.
- Ⓐ Ⓒ An aggressive encounter between turtle doves.
- *A An active nest of turtle doves; do not mark empty nests, which are of no territorial significance by themselves.
- A mat Turtle dove carrying nesting material.

Turtle dove movements can be shown as follows:

- A→ A turtle dove in flight (seen only in flight).
- Ⓐ→ A purring turtle dove perched then flying away (not seen to land).
- A A turtle dove flying in and landing (first seen in flight).

The following conventions indicate when registrations relate to different birds, and when to the same bird:

- A→A A turtle dove moving between two perches. The solid line indicates it was definitely the same bird.
- Ⓐ---Ⓑ Two turtle doves purring at the same time, i.e. definitely different males. The dotted line indicates a simultaneous registration and is of great value in separating territories.
- Ⓐ—Ⓐ The solid line indicates that the registrations refer to the same bird.
- Ⓐ—?—Ⓐ A question-marked solid line indicates that the registrations probably relate to the same bird.

A



No line joining the registration indicates that the birds are probably different but depending on the pattern of other registrations they may be treated as if only one bird was involved.