Carried out by Simon Carter.

INTRODUCTION

The Turtle Dove (Streptopelia turtur) is a migratory Dove arriving in the UK in late April/ May, and found mainly in the South and East of the country.

Since the 1970's its population in the UK has declined by 91%. For this reason it is listed as a Red Data Species by the IUCN (International Union for Conservation of Nature) under conservation concern, and forms part of the UK Biodiversity Action Plan (BAP).

According to the Sussex Ornithological Society Bird Report (2010), within the county of Sussex, records occur for just 6 tetrads with confirmed breeding of Turtle Doves, and probable breeding in a further 16 tetrads.

Turtle Doves are clearly present on the Knepp Castle Estate, and much suitable habitat exists, particularly in the southern section.

METHOD

3 early morning visits were carried out, starting at 0540 hrs on each occasion, in the southern section of the Estate.

Suitable habitat had been previously identified, and these areas were thoroughly observed during walking sessions that lasted for at least 4 hours on each visit.

2 additional visits were made, a pm survey 1630-2100hrs, and a morning survey 0645-1045hrs.

Observations and activity were recorded using BTO codes, to try and gain an indication of numbers of individuals in this area.

OBSERVATIONS

(see also attached map)

Visit A. 25/06/2012. *Conditions: Cloud cover- 20%, Rain- none, Wind- calm.*Area covered: Hammerpond including Tench Ford and New Barn North area, west to Broomers Corner, Woggs Bottom, Wagstaffs Wood, Oaklands Lagg, Brookhouse west of bridleway.

A total of 4 Turtle Dove observations, of at least 3 separate individuals.

3 of the observations, of at least 2 separate individuals, were concentrated around the 'Lower Barn' area, and the 4th (and last) sighting was of and individual at 'New Barn Bottom'. This bird was 'purring' for a lengthy period (maybe 15 minutes) before flying towards the south- eastern end of Hammer Pond at 1030hrs.

No Turtle Dove observations.

However, on the same morning, separate observers (Chris and John Hamilton) reported 3 Turtle Doves together in Brookhouse 4. They were perched on the power lines running across the field and flew into the trees along the stream gully to the west.

Visit C. 15/07/2012 Conditions: Cloud cover- 80%, Rain- brief spell(light), Wind- calm. Area covered: Brookhouse 4 and 5, and areas east of bridleway north to Bentons Gorse, Pond Field Lagg and associated gullies east to Wickwood and Tory Copse. Area south of Shipley village west to Blacksmiths Lagg.

Total of 2 Turtle Dove observations of 2 separate individuals.

1st bird was flying west over Brookhouse 10 at 0555hrs, and a separate bird was heard very briefly in Bentons Gorse at 0600hrs.

Additional Visits.

a. 1/07/2012 (1630-2100hrs) Conditions: Cloud cover- 50%, Rain- none, Wind- windy (upper branches swaying) decreasing to calm later.

Areas covered: Brookhouse 4 and 5 following stream gully north, crossing to Bentons Gorse. Lindfield Copse, New Barn Wood. Jackson's Wood and Tumbledown Lagg.

No Turtle Dove observations.

b. 2/07/2012 (0645-1045hrs) Conditions: Cloud cover- 50%, Rain- none, Wind- breezy.

Area covered: Brookhouse 4 and 5 following stream gully north, crossing to Bentons Gorse, Pond Field Lagg and associated gullies and Wickwood.

1 Turtle Dove observed, flying from perch along stream gully at northern end of Brookhouse 7, at 0845hrs.

SUMMARY

From my observations it was difficult to be precise about numbers of individuals or territories. Considering, however, the distribution of sightings by myself, and factoring in incidental sightings by the Hamiltons on the 26th June and Charlie Burrell on the 12th July (1 Turtle Dove in Bentons Gorse), I consider it reasonable to estimate that there ought to be at least 3 pairs of Turtle Doves present. 1 pair at the south-eastern end Hammerpond.

1 pair in Bentons Gorse.

At least 1 pair in the stream gully running to the west of Brookhouse 6 and 7.

Visits A, B, and C produced 6 sightings, in 3 distinct areas, and 'purring' birds were present at each location. Research suggests that a territory size to be between 2 -3 hectares, which would support the suggestion of at least 3 territories.

COMMENTS

Sightings in relation to territories need to be treated with caution since research has shown that birds may forage for food up to a distance of 10km.

Considerable periods of time were spent in favourable locations with no observations. This could mean simply that no territory existed in that area, or that due to timing, a territory could exist with adult birds away foraging for food at some distance.

For example, observations by others, and myself would indicate a territory at Bentons Gorse. However I spent a considerable period of time in this location, and only picked up the briefest few seconds of song on my final visit. In contrast, around the New Barn area where Turtle Doves had been more obvious, the area fell silent on several occasions illustrating the often secretive nature of this species (suggested as a response to persecution).

Another most important factor to highlight must be the unprecedented weather condition of this season. Continuous low pressure weather systems, routinely cold and wet, allowed little favourable weather (only visit **A.** was ideal) for surveying, and further delayed visit dates. The conditions would have almost certainly reduced activity, whilst singing may have been naturally reducing with the progression of season.

Under-recording could therefore have been a possibility.

I consider that the frequency of observation, despite prevailing conditions, demonstrates the great importance of this site. In all of my experience exploring and birdwatching in the wider Sussex countryside, encountering a Turtle Dove is a rare and exciting experience. To make the above number of observations during one short survey is, I believe, extremely significant.

KEY TO SYMBOLS USED ON MAP

TD
Turtle Dove

Turtle Dove singing

TD
Turtle Dove flying from perch

Turtle Dove in flight only

TD ------ TD ------ A question mark indicates a possible repeat sighting from an earlier observation.

A Associated letter denotes on which visit observation was made.

REFERENCES

SJ Browne, NJ Aebischer. Habitat use, foraging ecology and diet of Turtle Doves in Britain British Trust for Ornithology. Bird Trends

English Nature, (JR Calladine, F Buner, NJ Aebischer). *Summer ecology and habitat use of the Turtle Dove.* Sussex Ornithological Society Bird Report 2010.

