

Turtle Dove Reintroduction in Britain

Why captive breeding and release should form part of an integrated recovery strategy

Oliver Crowther | OC Aviary

September 2026

The central argument

Habitat restoration is essential, but habitat alone cannot guarantee recolonisation when a population has become small, fragmented and strongly site-faithful. Carefully managed releases can help put birds back into restored landscapes, reinforce remaining populations and reconnect a species with places it has lost.

A species still in trouble in Britain

The European Turtle Dove (*Streptopelia turtur*) was once a characteristic bird of the British countryside. Its decline has been severe. The 2024 Breeding Bird Survey reports a 98% decline in the British population since 1995, with no signs of recovery in Britain even as recovery has begun along parts of the Western European flyway.

That distinction matters. Improvement at a continental scale does not automatically translate into recovery at the northern edge of the species' range. Britain now holds a much smaller and more fragmented breeding population, and its future should therefore be considered in the context of the conditions facing birds here.

Habitat restoration is essential - but is it enough?

There is no credible case for releasing Turtle Doves into unsuitable habitat. Recovery depends on restoring the ecological conditions the species needs: nesting scrub, abundant seed-rich feeding habitat and landscapes managed in ways that provide food throughout the breeding season.

However, creating good habitat is only one half of the problem. Where Turtle Doves have already disappeared, or survive only at very low density, suitable landscapes can remain unoccupied. The familiar conservation idea of 'build it and they will come' becomes increasingly uncertain when there are very few birds left nearby to do the coming.

Turtle Doves also show strong site fidelity. As populations contract, this can reinforce fragmentation: surviving birds continue returning to established areas while restored habitat elsewhere may receive little or no natural recruitment. Small and isolated subpopulations may also become more vulnerable to demographic chance and genetic bottlenecks.

This is where targeted releases can complement habitat work. Captive-bred birds can be released into carefully selected, ecologically suitable landscapes to help establish or strengthen local populations, improve connectivity and accelerate recolonisation that might otherwise take decades - or fail to occur at all.

Reintroduction is not a substitute for habitat

The choice should not be framed as habitat restoration versus reintroduction. For Turtle Doves, the strongest approach is likely to use both.

Habitat creation addresses the environmental causes that limit the species. Captive breeding and release address a different problem: the shortage and fragmentation of birds available to occupy that habitat. Used together, these tools can restore both the landscape and the population capable of using it.

This is particularly important for a long-distance migrant exposed to substantial mortality beyond the breeding grounds. Relying entirely on natural immigration from continental Europe to rebuild a severely depleted British population is not without risk, especially when there is no guarantee that increases elsewhere will translate into sufficient recruitment into Britain.

Do captive-bred Turtle Doves migrate?

A persistent concern is that captive-bred Turtle Doves will not migrate, or that migratory behaviour has somehow been lost through generations in captivity. Evidence from British releases does not support treating that assumption as fact.

Released birds have shown pre-migratory behaviour, including late-summer flocking and seasonal disappearance. More importantly, satellite tracking has directly demonstrated migration. A captive-bred Turtle Dove released near Norwich in summer 2025 began migration on 16 September, spent eight days in France and subsequently crossed the Bay of Biscay to northern Spain on 30 September - following the Western European flyway.

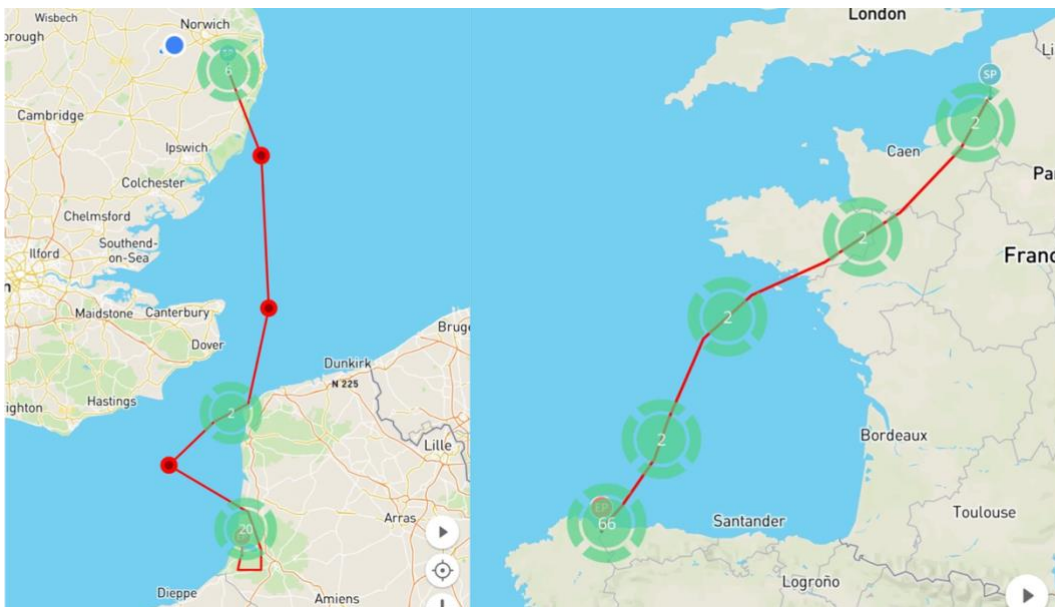


Figure 1 - The migration of a captive bred bird released by the Turtle Dove Trust at a site near Norwich in the summer of 2025. Migration began on Tuesday 16th September, the bird spent 8 days in France before flying over the Bay of Biscay to northern Spain on Tuesday 30th September.

Records from release projects since 2020 also show marked birds disappearing in autumn and reappearing in spring. The available tracking sample remains small, so continued satellite tracking is important, but the evidence already demonstrates that captive origin does not prevent Turtle Doves from expressing long-distance migratory behaviour.

Occasional overwintering in Britain should not automatically be interpreted as a failure of reintroduction either. Wintering Turtle Doves were recorded in Britain decades before current release projects; Payn (1962), for

example, documented wintering birds in Ipswich. Behavioural flexibility is therefore not unique to captive-bred birds.

Managing health, genetics and behaviour

Reintroduction carries responsibilities as well as opportunities. Disease, genetics, welfare and post-release performance all need to be managed rigorously. The breeding programmes use UK-origin stock, veterinary-led disease risk analysis, quarantine and biosecurity measures, and husbandry intended to maintain natural behaviours including foraging, nest building and chick rearing.

These safeguards matter because the objective is not simply to produce large numbers of birds. It is to produce healthy, behaviourally competent individuals that can survive, breed and contribute to a functioning wild population.

What success should look like

The long-term objective is not a permanently managed or non-migratory population. It is a self-sustaining, migratory British breeding population occupying suitable habitat and contributing to the wider Western European population.

Releases should therefore be treated as an adaptive conservation intervention: birds should be individually identifiable where possible, survival and migration should be monitored, breeding and recruitment recorded, and release methods refined as evidence accumulates. If results show that an approach is ineffective, it should change.

There is not yet definitive evidence that captive breeding and release alone can secure the long-term recovery of Turtle Doves in Britain - nor should that be claimed. But that is not the same as saying the tool has no value. Early evidence shows released birds can behave naturally, migrate and breed, while the British population remains in a precarious state.

An integrated route to recovery

The case for Turtle Dove reintroduction is ultimately a case for using every appropriate conservation tool together. Restore nesting and feeding habitat. Address the pressures responsible for decline. Maintain high standards of biosecurity and genetic management. Monitor released birds. And, where populations are too depleted or fragmented to recolonise suitable landscapes effectively, use carefully managed releases to help put Turtle Doves back.

Sometimes, 'build it and they will come' is not enough. We may also need to give them a way back.

References

- Carboneras, C., Rubio, B., Cruz-Flores, M., Guillemain, M. & Arroyo, B. (2025). Turtle Dove AHMM Management Scenarios and Technical Recommendation: TFRB 25-03-02. European Turtle Dove Adaptive Harvest Management Mechanism.
- Heywood, J.J.N. et al. (2025). The Breeding Bird Survey 2024. BTO Research Report 787. British Trust for Ornithology, Thetford.
- Payn, W.H. (1962). Birds of Suffolk.
- Raven, M.J., Noble, D.G. & Baillie, S.R. (2007). The Breeding Bird Survey 2006. BTO Research Report 471.

Stanbury, A. et al. (2023). The status of the UK breeding European Turtle Dove *Streptopelia turtur* population in 2021. *Bird Study*, 70(1), 1-12.

Vickery, J.A. et al. (2014). The decline of Afro-Palaeartic migrants and an assessment of potential causes. *Ibis*, 156(1), 1-22.