

Designing spaces for birds and bats: Commuting

A practical ecological approach

For birds and bats, **moving between roosting and foraging areas** (known as commuting) is a vital part of their **daily routine**. These commuting corridors often **follow linear features** such as hedgerows, treelines, and even isolated trees, which provide both orientation and shelter.

Maintaining and **improving** these natural linkages is essential in agricultural settings like olive groves and vineyards, where landscape connectivity supports the **movement**, **survival**, and **long-term presence** of diverse species. A well-connected landscape not only benefits wildlife but also strengthens the **ecological health of farming systems**.

Connecting the landscape

How commuting corridors support birds, bats, and biodiversity in farmland

Remnant trees and small woodland patches:

They support the movement of birds and bats by acting as **natural stepping stones**, and also play a **key role in plant regeneration**. Through **seed dispersal** by frugivorous birds, these patches help **establish new seedlings** and young trees beneath their canopies, contributing to greater biodiversity and ecological resilience.

Riparian areas and stream buffers

These zones provide **valuable habitats** for many bird and bat species and often support **higher reproductive success**, making them key population sources. They also improve landscape connectivity by supporting **the movement of species like frugivorous birds**, which contribute to seed dispersal and ecosystem regeneration.

Hedgerows

These vegetated strips provide **orientation**, **shelter**, and **safe passage** between roosting and foraging areas, especially **in open or intensively managed farmland**. For bats, hedgerows help **minimize energy expenditure** and predation risk by offering dark, cluttered pathways that facilitate echolocation and navigation. For birds, especially small passerines and frugivores, hedgerows serve as **stopover sites** for feeding, resting, and movement between fragmented habitats.



Supporting commuting routes

Practical ways farmers can improve wildlife connectivity

Farmers can support bird and bat commuting by **planting** and **maintaining hedgerows, creating wildlife corridors**, and **establishing buffer zones** around watercourses. These corridors help connect fragmented habitats, providing safe passage for species.



By **reducing pesticide use**, **creating artificial roosting sites** like bat and bird boxes, and **minimizing light pollution**, farmers can further improve these routes.

Engaging in **sustainable farming initiatives** and collaborating with **conservation groups** can also help create and **maintain these essential wildlife corridors**, ultimately supporting the movement and survival of birds and bats in agricultural landscapes.