

Species Action Plan

Stepping Stones project



Last updated: January 2024

Common name: Dormouse

Scientific name: *Muscardinus avellanarius*

Conservation status: Red listed. Shropshire BAP.

Description: Small mammal (60-90 mm) with orange/yellow fur and a distinctive thick, furry tail (55-70mm). Eyes and ears are large and paws are turned sideways (for climbing).

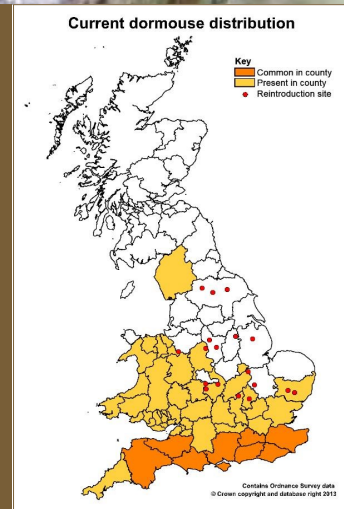
Habitat: deciduous, coniferous and mixed woodlands, overgrown hedgerows and scrub.

Behaviour: A strictly nocturnal species, spending most of its time climbing tree branches in search of food and rarely coming to ground. Food includes nuts, berries, flowers and insects. Daytime is spent asleep in tree hollows or nest boxes. Body temperature is lowered to conserve energy when food is scarce or weather adverse. Dormice hibernate in winter, emerging in April/May.

Nests, constructed in tree holes or dense scrub are 100-150 mm diameter and woven from grasses and honeysuckle bark. One, sometimes two litters, each with around four young are raised in a year, the young taking 6-8 weeks reach independence.

Distribution and threats: Mainly found in UK's southern counties, with few recorded localities north of the midlands. Present in scattered Welsh localities.

Dormouse numbers have severely declined over the last two centuries due to loss and fragmentation of ancient woodlands, reduction in coppicing, damage to woodland by livestock and deer and now, milder winters brought on by a changing climate.



Dormouse distribution in the UK (source: PTES)



Characteristic marks on nibbled hazelnuts are a key indication that dormice are present at a site



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Dormouse *Muscardinus avellanarius*



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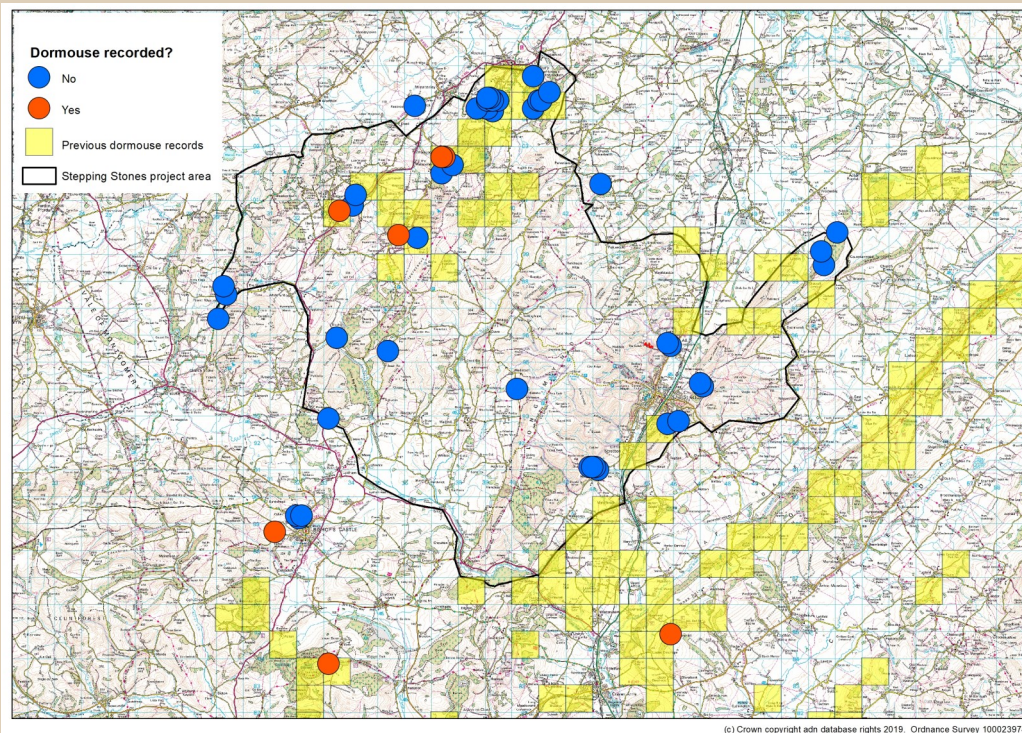
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Distribution of dormouse in the Stepping Stones project area

Most dormouse records in the project area are correlated with ancient woodlands. Planted Ancient Woodland Sites (PAWS) are also important in the Stepping Stones project area but only where they are connected to broadleaved woodland, these conifer woodlands clearly retaining some habitat value for dormouse. Non-PAWS coniferous woodland though, holds few records, suggesting that these are not intrinsically important to dormice in the project area. Outside ancient woodland, dormice are mostly associated with broadleaved woodland. Hedgerows were not included in analysis of local data.

Dormice are poor colonisers, live at low densities and have a low reproductive rate and woodlands of ≥ 20 ha, or interconnected woodlands are needed for viable populations. In the project area, individual woodlands are typically much smaller than 20 ha and it is likely that dormice are using connections like hedgerows and scrub to move between sites. Dormice typically forage within 70m of their nest site but are known to travel up to 1km .

Key dormouse sites, monitored by the Shropshire Dormouse Group in the Stiperstones area are, Brook Vessons, Snailbeach Coppice, Hope Valley Woodland and Earl's Hill, although the latter has not seen dormice for some years. Ragleth Wood near Church Stretton has good populations. Helmeth Wood, a Local Wildlife Site and broadleaved woodland is over 20 ha but has no records and is therefore a good candidate for survey work. Dormouse numbers do appear to be generally dropping in the project area.



Left: map showing the full results of the 2020 Stepping Stones Dormouse Detectives survey (dots), overlaid with previous dormouse records (yellow 1km squares);

Conservation for Dormouse

Dormice are strictly protected by law and a licence is required for handling and to check nest boxes. Since they thrive in diverse habitats which provide food from various trees and shrubs, sensitive coppicing will allow light into a woodland thus increasing flowering and fruiting of woody species. Woodland edges are particularly good for dormice in the Stepping Stones project area and so coppicing and creation of scallops along these scrubby edges are very beneficial.

Large cleared areas will interfere with their movement, since dormice live mostly above ground.

Nest boxes erected with the entrance facing a tree trunk, increase the survival and breeding success of dormice. Re-introductions since 1992 in several counties like Cheshire have been successful. The woodland habitat has to be diverse and introductions may involve long periods of supplementary feeding, with a high risk of failure if fewer than 20 animals are released. The presence of dormice in a locality can be determined by examining hazel nuts. Dormouse chewed nuts are unique in having a smooth inner rim, with tooth marks at an angle to the hole of the nut surface.

Dormouse Muscardinus avellanarius

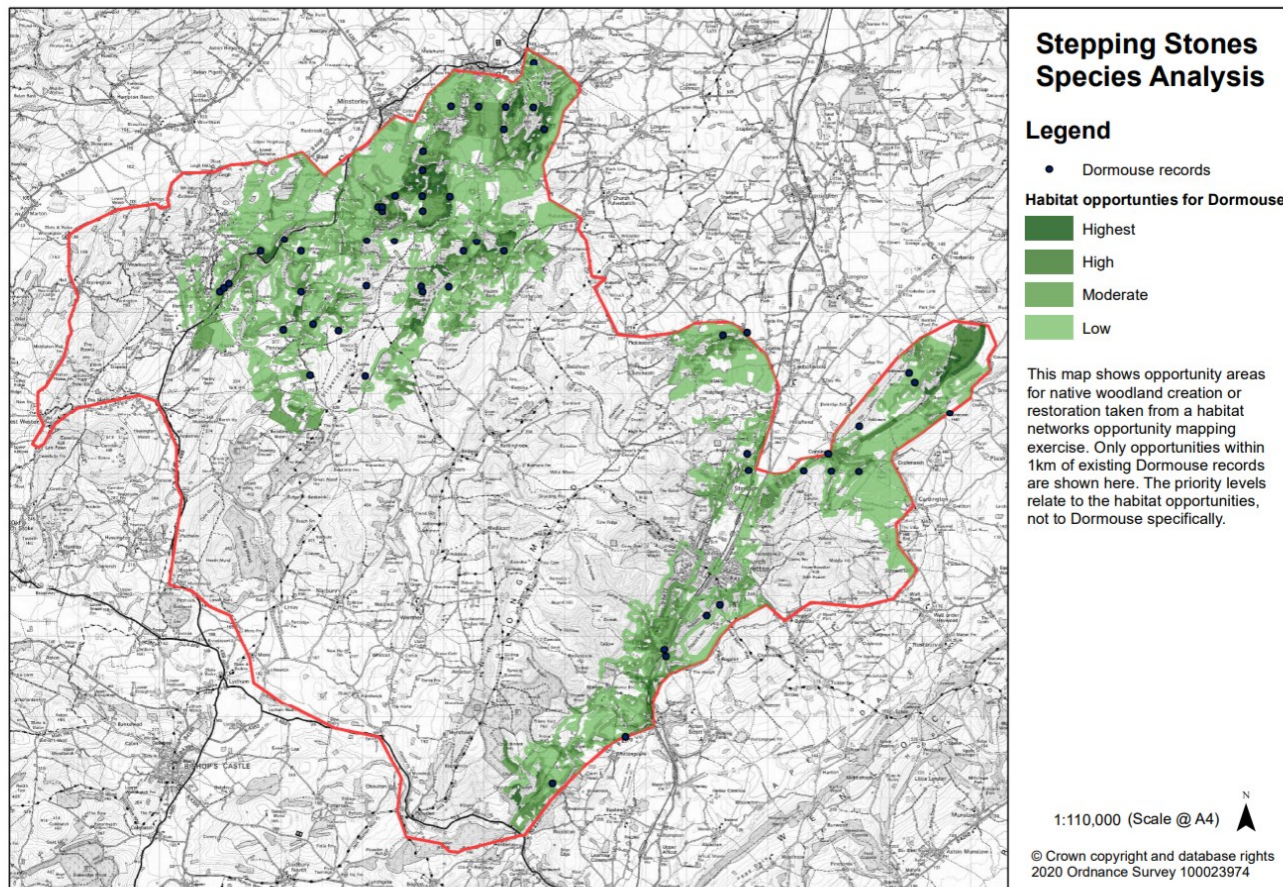


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Habitat creation opportunities for Dormouse in the Stepping Stones project area

Map showing opportunity areas for broadleaved woodland creation or restoration that fall within approximately 1 km of the dormouse records.



The woodland opportunities above were identified in the Stepping Stones project area network mapping exercise, based on the Lawton et al (2010) principles of 'Bigger, More and Joined'. The illustrated priority levels of Low to High relate to how well opportunities for creation and restoration would enhance the woodland network in the area based on these Lawton principles, rather than on factors which are specific to dormouse.

Conservation objectives for Dormouse

- Maintain accurate and up-to-date records of dormouse in the Stepping Stones project area, surveying all suitable sites using the habitat analysis mapping.
- Monitor condition of woodlands with existing dormouse populations and broad-leaved woodlands ≥ 20 ha where no records exist.
- Restore those 'unfavourable' woodlands to a condition which meets dormouse requirements.
- Using the habitat opportunity mapping, both increase broad-leaved woodland cover and create or strengthen links between woodlands in the project area to encourage the spread of dormice.



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Dormouse *Muscardinus avellanarius*



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Conservation actions for Dormouse

- During 2024 and 2025, training on dormouse ecology achieved for all broadleaved woodland and PAWS site owners in the Stepping Stones project area with the help of Shropshire Dormouse Group and Shropshire Wildlife Trust and working closely with the Forestry Commission.
- By 2025 to have produced an inventory of all existing dormouse sites in the project area through surveys and monitoring, to include habitat condition of sites and management requirements.
- By 2026 to have extended the surveys and monitoring of all broadleaved woodland and PAWS sites ≥ 20 ha and those smaller sites which are < 1 km from existing dormouse sites in the project area (ref. habitat opportunity map). Inventory to include woodland habitat condition and management requirements.
- Woodland owners of such sites above to undertake management of their woods to improve conditions for dormouse. Overall target of four dormouse sites managed annually with help from Shropshire Dormouse Group.
- Woodland owners to work with neighbours to create/improve links between four of the above target woodland sites annually with the help of Shropshire Dormouse Group.
- By 2025 to have ensured that the Dormouse is recognised in NELMS as a priority species needing tailored management and advice in the targeting statement for the Shropshire Hills.

Actions to be reviewed and updated annually.



Checking dormouse boxes

Further help and advice

Locally: facebook.com/groups/ShropshireDormouseGroup

shropshiredormouse@gmail.com

Nationally: mammal.org.uk/hazel-dormouse

ptes.org/campaigns/dormice/



About Stepping Stones

Stepping Stones is an innovative landscape-scale conservation programme. The aim is to connect wildlife habitats by strengthening or creating 'stepping stones' and corridors of habitat between the Long Mynd and Stiperstones and beyond. In practice, this means creating and linking areas of heathland, flower-rich grasslands and broadleaved woodland by a network of wildlife-rich hedgerows, road verges, hillsides and streamside wetlands.



Stepping Stones

Creating and linking wildlife-friendly spaces



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