

Dartmoor Delivery Plan for Greater Horseshoe Bat

Description and Importance of the Species

The greater horseshoe bat (*Rhinolophus ferrumequinum*) is the larger of the two horseshoe bats, and one of the largest bat species found in Britain. They are so-named from the horseshoe shaped nose-leaf, used as part of the bat's echolocation system. Juvenile animals are grey, adults a creamy buff/brown, their bodies are up to 70mm long and they have a wing-span of up to 390mm. When roosting, they hang freely upside down from their feet, and when torpid wrap their wings around their body. The greater horseshoe bat is one of Britain's rarest bats, with only an estimated 6-7,000 individuals in the country.

Like all UK bat species, the greater horseshoe bat is listed on Annex IV of the EC Habitats Directive, but due to its rarity, it is also afforded extra protection by being listed on Annex II.

Current Status on Dartmoor

The south-eastern edge of Dartmoor holds the largest population of greater horseshoe bats in the



UK, with one roost at Buckfastleigh being the largest known maternity roost in the UK and possibly in western Europe. There are six known significant roosts in and neighbouring Dartmoor; five of these sites are designated as SSSIs, which in combination make up the South Hams SAC. Two of these SSSIs are located within the National Park, namely Haytor and Smallacombe Mines SSSI, and Buckfastleigh Caves SSSI. Haytor and Smallacombe Mines SSSI is a hibernation site with fairly low numbers of bats (around 15), whilst Buckfastleigh Caves SSSI is used for both breeding and hibernation purposes, with around 1,500 bats (25% of the UK population) present in the summer months. In addition to roosts, the bats require the wider countryside for foraging, commuting and mating purposes. They use linear features in the landscape such as watercourses and hedgerows to navigate, and forage mainly over unimproved fields and pastures. They are extremely sensitive to light, and will avoid artificially lit areas. As such, the unlit, enclosed, extensively managed farmland on the eastern side of Dartmoor provides a significant contribution to their foraging range, with numerous small roosts known to exist scattered within the open countryside.

Greater horseshoe bat, © DNPA



Greater horseshoe bat habitat, © DNPA

Issues affecting the Species on Dartmoor

- Degradation of foraging habitat through agricultural intensification and the use of avermectins on cattle, which kill dung beetles, one of their main prey items
- Development, especially around the urban centres of Ashburton and Buckfastleigh, potentially leading to increases in lighting levels and reduction or fragmentation in foraging and commuting habitat
- Development such as the conversion of rural buildings, leading to damage or destruction of small roosts
- Lack of knowledge of where mating sites are located
- There is likely to be a reduced budget for future agri-environment agreements within the wider countryside in areas that support this species
- Insensitive hedgerow management, whereby annual flailing doesn't provide sufficient cover for flyways or food
- Only the major roosts are designated as SSSI/SAC, but the wider countryside and features used by greater horseshoe bats between these roosts, which are essential to sustain the population, are not formally protected
- The wide geographical metapopulation structure requires many public bodies to coordinate their plans and policies

Current Initiatives on Dartmoor

- The South Hams SAC Steering Group includes Devon County Council, NE and DNPA, together with the neighbouring local authorities who have greater horseshoe bat SSSIs in their area, and a specialist consultant for this species. The aim of this group is to have a joint strategic approach to avoid negative impacts of development within the wider South Hams SAC area, to consider cumulative impact, and to gather data collectively
- A Devon-wide HLF bid is currently being drawn together by Devon Wildlife Trust and East Devon County Council, aiming to support the long term persistence and enhancement of greater horseshoe bat populations through linked landscape scale conservation initiatives across Devon
- The English Nature Species Recovery Project which ran from 1998-2003, and the Action for Wildlife Greater Horseshoe Bat Project which ran from 2004 to 2008, worked with farmers and landowners around known roosts to increase awareness and to enhance the habitat for bats. The outputs from these two projects continue to inform habitat management and agri-environment funding
- Higher Level Stewardship agreements have incorporated much work to get habitats – pastures and hedgerows - better managed in recent years.
- The DNPA have made many improvements to the planning system to ensure that bat roosts, including greater horseshoe bat roosts, are better protected through the planning system
- DWT and VWT own and manage some of the roost sites in the Buckfastleigh cave system
- The Landscape Partnership Bid 'Moor Than Meets the Eye' contains Natural Connections and Postbridge Haymeadows Projects, both of which will connect species-rich wet and dry grasslands to make a landscape more permeable to wildlife, including greater horseshoe bats



Over-wintering cave roost, © DNPA

Targets

- Maintain numbers of greater horseshoe bats at current levels within the two SSSIs in the Dartmoor National Park area, with summer roost counts averaging > 1500 at Buckfastleigh, and hibernation roost count averages of 15 at Haytor and Smallacombe Iron Mines
- Improve the habitat connectivity, quality and permeability to greater horseshoe bats in the wider landscape by targeting flyways and suitable sites within the sustenance zones as a priority to enter into agri-environment schemes
- Create links between Dartmoor and the landscape beyond as targeted through 'Habitat Links' in Living Dartmoor and the 'Rebuilding Devon Nature Map', with a particular focus around Buckfastleigh, and the area from Bovey Tracey, Chudleigh and Newton Abbot, again through prioritising agri-environment schemes in those areas

Delivery and Monitoring

Maintain the South Hams SAC Greater Horseshoe Bat Steering Group. A key action is to input into the revised guidance, and to update the records of greater horseshoe bats found within the wider countryside to provide more robust and up-to-date maps of the flyways used.

A critical ongoing action is to provide high-quality technical advice into development proposals, both at the strategic and the reactive levels, to ensure that development within the wider greater horseshoe bat foraging and commuting areas present at least a neutral and where possible a positive impact.

Ongoing input into planning applications in relation to the protection of bat roosts, as well as the wider countryside will also be carried out by the DNPA Ecologist, Natural England, Devon County Council and neighbouring authority ecologists where appropriate.

Agri-environment agreements will be the main mechanism to support appropriate grazing and boundary management at sites, and are being delivered through Natural England, guided by the known sustenance zones and flyways, as well as the strategic Living Dartmoor habitat links and 'Rebuilding Devon Nature Map'.

Undertake research to find greater horseshoe bat mating sites, and to improve the current mapped flight paths, radio-tracking and coordinated data gathering – to be implemented through the South Hams SAC Steering Group and the Devon Greater Horseshoe Bat Initiative, with an academic lead by Exeter University.

	Lead	2014	2015	2016	2017	2018
Update SHSAC Greater Horseshoe Bat Planning Guidance	SHSAC Steering Group	x				
Keep the planning guidance and supporting evidence up to date	SHSAC Steering Group		x	x	x	x
Technical advice into development management at strategic and reactive levels	DNPA	x	x	x	x	x
Provide suitable habitat conditions through agri-environment schemes in areas prioritised	NE	x	x	x	x	x
Implement the Devon-wide Greater Horseshoe Project	Devon GHB Steering Group		x	x	x	x
Continue appropriate management of Buckfastleigh Caves by Vincent Wildlife Trust and Devon Wildlife Trust	VWT/DWT	x	x	x	x	x
Continued monitoring of greater horseshoe bats at two Dartmoor roosts	VWT/NE	x	x	x	x	x
Undertake research to find greater horseshoe bat mating sites and better understanding of their use of the wider landscape	Devon GHB Steering Group, SHSAC Steering Group, Exeter University		x	x	x	x