

## Conservation Objectives for : East Burren Complex SAC [001926]

### 1303 Lesser Horseshoe Bat *Rhinolophus hipposideros*

To restore the favourable conservation condition of Lesser Horseshoe Bat (*Rhinolophus hipposideros*) in East Burren Complex SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population per roost	Number	Minimum number of 103 bats for the linked summer roosts (roost id. 132 and roost id. 825 in NPWS database), minimum number of 150 bats for the summer roost with roost id. 216 and minimum number of 100 bats for the summer roost with roost id. 130; minimum number of 50 bats for the winter roost with roost id. 126 and minimum number of 108 bats for the winter roost with roost id. 144. See map 10	A figure of 100 bats for summer roosts and 50 bats for winter roosts was set as a minimum qualifying standard (MQS) when SACs were being selected for lesser horseshoe bat ( <i>Rhinolophus hipposideros</i> ). NPWS conduct annual counts at each qualifying roost. Qualified means from the 2016-2020 summer data and 2017-2021 winter data have been calculated whereby the year with the highest maximum count and the year with the lowest maximum count were removed and the mean of the remaining years was calculated. This mean is set as the target figure for the relevant summer and winter roosts in East Burren Complex SAC. However, in the case of the summer roost with roost id. 130, where a mean of 63 bats was recorded, the target is instead set at the MQS of 100 bats. Also, in the case of winter roost with roost id. 126, where a mean of 44 bats was recorded, the target is instead set at the MQS of 50 bats. See NPWS (2018) for further information on all attributes and targets
Winter roosts	Condition	No decline	East Burren Complex SAC has been selected for lesser horseshoe bat because of the presence of two internationally important winter roosts (roost id. 126 and roost id. 144 in NPWS database). Damage or disturbance to these roosts or to the habitat immediately surrounding the roosts will lead to a decline in their condition (Mitchell-Jones et al., 2007). See the conservation objectives supporting document for lesser horseshoe bat (NPWS, 2018) for further information on all attributes and targets
Summer roosts	Condition	No decline	East Burren Complex SAC has been selected for lesser horseshoe bat because of the presence of two internationally important summer roosts (roost id. 216 and roost id. 130 in NPWS database) and two linked roost sites that together form an additional internationally important roost (roost id. 132 and roost id. 825). Damage or disturbance to the roosts or to the habitat immediately surrounding the roosts will lead to a decline in their condition (Kelleher and Marnell, 2006)
Auxiliary roosts	Number and condition	No decline	Lesser horseshoe bat populations will use a variety of roosts during the year besides the main summer maternity and winter hibernation roosts. Such additional roosts within the SAC may be important as night roosts, satellite roosts, etc. Night roosts are also considered an integral part of core foraging areas and require protection (Knight and Jones, 2009). In addition, in response to weather conditions for example, bats may use different seasonal roosts from year to year; this is particularly noticeable in winter. Several other winter and summer roosts that support lesser horseshoe bats, but at numbers below the MQS figures, are known from East Burren Complex SAC. A database of all known lesser horseshoe bat roosts is available on the National Biodiversity Data Centre website. NB further unrecorded roosts may also be present within this SAC

Extent of potential foraging habitat	Hectares	No significant decline within 2.5km of qualifying roosts	Lesser horseshoe bats normally forage in woodlands/scrub within 2.5km of their roosts (Schofield, 2008). See map 10 which shows a 2.5km zone around the above roosts and identifies potential foraging grounds
Linear features	Kilometres	No significant loss within 2.5km of qualifying roosts. See map 10	This species follows commuting routes from its roost to its foraging grounds. Lesser horseshoe bats will not cross open ground. Consequently, linear features such as hedgerows, treelines and stone walls provide vital connectivity for this species within 2.5km around each roost (Schofield, 2008)
Light pollution	Lux	No significant increase in artificial light intensity adjacent to named roosts or along commuting routes within 2.5km of those roosts. See map 10	Lesser horseshoe bats are very sensitive to light pollution and will avoid brightly lit areas. Inappropriate lighting around roosts may cause abandonment; lighting along commuting routes may cause preferred foraging areas to be abandoned, thus increasing energetic costs for bats (Schofield, 2008)