

COUNTY: WILTSHIRE SITE NAME: BOX MINE

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authorities: NORTH WILTSHIRE DISTRICT COUNCIL,
Wiltshire County Council

National Grid Reference: ST 838690 Area: 56.6 (ha.) 139.8 (ac.)

Ordnance Survey Sheet 1:50,000: 173 1:10,000: ST 86 NW

Date Notified (Under 1981 Act): February 1991 Date of Last Revision: –

Other Information:

Description and Reasons for Notification:

Box Mine is an extensive network of man-made tunnels which is used by bats for hibernation, mating and as a staging post prior to dispersal. The mine seasonally supports up to 10% of the total British population of greater horseshoe *Rhinolophus ferrumequinum*, one of the rarest native bat species. All British bat species have suffered marked population decline over the last forty years due partly to habitat destruction and partly to poisoning from persistent toxic chemicals used in treating structural timbers.

Mining work at Box, begun originally in Roman times and continued intermittently to the present, produced 'free stone' for the building industry from the Great Oolitic Limestone deposits of the middle Jurassic. The few remaining entrances to the mine system emerge in shallow quarries which now contain secondary beech and ash woodland.

Small numbers of bats use the system throughout the year but the site is particularly important for bats as a hibernaculum between October and May and as a dispersal site in July and August. Highest numbers have been recorded immediately after the breeding season and during periods of prolonged cold weather when small sites become unsuitable and are vacated for the more stable temperature and humidity conditions at Box Mine.

A maximum of 230 greater horseshoe bats have been recorded at Box Mine. This species has undergone a dramatic decline in numbers since 1900 and is now found regularly only in south-west England and South Wales. Other bat species using the system include whiskered *Myotis mystacinus*, brandts *M. brandti*, natterers *M. nattereri*, daubentons *M. daubentoni* and the lesser horseshoe *Rhinolophus hipposideros*, a species with a markedly western distribution.

The site boundary has been drawn to include all the known subterranean workings believed to be of significance to bats. Most of the land surface is intensively farmed and is not known to be of scientific interest, but the woodland is important as a feeding area for bats.