

Date: 15 May 2008

BAT ECOLOGY AND MITIGATION

SUMMARY OF PROOF OF EVIDENCE OF
GEOFF BILLINGTON MIEEM
ON BEHALF OF WILTSHIRE COUNTY COUNCIL

PUBLIC INQUIRY INTO:

WILTSHIRE COUNTY COUNCIL PLANNING APPLICATION W07.09002
LAND TO THE EAST AND NORTH OF WESTBURY, WILTSHIRE,
DEVELOPMENT: CONSTRUCTION OF A SINGLE CARRIAGEWAY ROAD
WITH CLIMBING LANE OVER PART OF THE ROUTE, ROUNDABOUT
JUNCTIONS, ASSOCIATED INFRASTRUCTURE
CALLED IN FOR DETERMINATION BY THE SECRETARY OF STATE,
COMMUNITIES & LOCAL GOVERNMENT (SECTION 77 TOWN AND
COUNTRY PLANNING ACT 1990 AS AMENDED)

THE WILTSHIRE COUNTY COUNCIL (A350 WESTBURY BYPASS
CLASSIFIED ROAD) COMPULSORY PURCHASE ORDER 200'

THE WILTSHIRE COUNTY COUNCIL (A350 WESTBURY BYPASS
CLASSIFIED ROAD) SIDE ROAD ORDER 200'



SUMMARY OF EVIDENCE

1. My name is Geoffrey Billington I am head ecologist of a small consultancy specialising in bats. I have studied bats for 19 years and have carried out professional work in this field in a full time capacity for 12 years.
2. I have extensive experience of working on at least 15 Highway schemes, 10 of them as the main bat ecologist.
3. I have been involved with this scheme since 2005.
4. This evidence is concerned with the ecological and nature conservation effects on local bat populations by the A350 Westbury Bypass proposals, and the effects resulting from the construction and operation of the road.
5. Wildlife legislation that is relevant to the proposed road scheme and bats.

Wildlife & Countryside Act 1981 (as amended)

6. All British bat species are included in schedule 5 and are fully protected under section 9 of this act. It is an offence to intentionally kill or injure a bat, to damage or obstruct access to a roosting site or to disturb a bat whilst it is occupying its roost. This law was strengthened in 2000 by amending the wording from deliberate to reckless by the Countryside and Rights of Way Act.

European Community Habitats Directive 1992

7. This includes all British bat species, it prohibits deliberate disturbance particularly during the period of breeding, rearing, hibernation and migration. Allowing deterioration or destruction of resting places (roosts) or breeding sites is prohibited. Under this Directive Special Areas of Conservation (SACs) are designated by member states for Annex II bat species. This Directive includes maintaining flight routes of Annex II bat species to ensure they can access foraging areas.

Habitat Regulations 1994 (as amended)

8. These implement the provisions of the Habitats Directive for the purposes of British law. All British bats are included on Schedule 2 making it an offence to deliberately capture, kill, disturb a bat or to damage or destroy a breeding site or resting place used by a bat. Any activity that would result in a contravention of the legislation would require a licence to avoid committing an offence. Licences are issued by Natural England only if a number of criteria are satisfied namely ensuring relevant species are maintained by appropriate mitigation.

PPS9

9. Local authorities through the planning process have to promote sustainable development by ensuring that biological diversity are conserved and enhanced. Where possible improving, the quality and extent of natural habitat. If properly applied PPS9 includes protection of flight habitat.

Natural Environment & Rural Communities Act 2006

10. Local authorities must 'have regard for any damage or effect proposals would have on Biodiversity Action Plan bat species and to conserve biodiversity. If properly applied this act also includes protection of flight habitat.
11. A range of survey techniques has been employed to determine the extent of bat assemblages occurring in and around this scheme between 2002 & 2008 recording at least 13 bat species including four from Annex II.
12. A desktop study of bat records within 10km radius of the scheme revealed 732 records of at least 13 bat species, 11 of the species within the 2km of the scheme.
13. Bat detector surveys in 2002, 2003, 2004 & 2006 recorded at least twelve bat species. High numbers of bats were recorded commuting across the proposed route at Chalford and Wellhead Springs. A

number of significant flight routes would be intersected by the scheme.

14. Investigation of potential bat roosts in trees, buildings and structures along and close to the route were carried out, two specific building surveys for Horseshoe bat roosts and four radio tracking studies identified a number of roosting sites. Close to the route these included at Westbury Cemetery and Wellhead Springs culvert, in the area nursery sites were identified at Westbury Leigh, Bratton Church, Dilton Court and Rood Ashton Manor.
15. No buildings or other structures (bridges or culverts) are directly affected by the proposed scheme.
16. Bat roosts in trees were found at Wellhead Springs, White Scar Hanging, Blenches Mill, Clanger Wood, Flower Wood and at West Ashton.
17. One tree roost of a small number of bats would be lost and three tree roosts lie close to the scheme that could be disturbed by it.
18. Ringed Greater Horseshoe bats were linked to Bath and Bradford on Avon Bats SAC, Natural England (previously English Nature) agreed an appropriate Assessment is not required as the scheme would be unlikely to have a detrimental effect on the SAC.
19. The assemblages of rare species (Annex II) occurring on this site are of national and international importance and overall numbers of bats using this site are of regional importance. Under the Department of Transport TAG assessment system the flight lines are attributes of 'very high' importance the highest category, so maintaining them is vital.
20. For this reason the extensive mitigation measures have been designed that will bring the overall effect of the scheme to be 'slight adverse'.
21. The bat mitigation proposals, which cover all the main bat flight routes across the scheme, are designed to maintain flight routes, create safe corridors and re-create foraging sites. It includes

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multiple elements (up to five per site) so that if one component (e.g. underpass) is not 100% effective a further component is included to ensure safe flight routes are maintained. This does include a requirement to slightly increase the compulsory land take for planting to maintain and enhance flight route approaches to bat crossings between Bere's Mill and Chalford with hedges and specimen trees. To ensure adequate flight routes around bat crossings for all bat species are maintained 2m high hedges will be planted to link up where hedges are being removed, or have existing gaps to improve them in close proximity to the scheme.

22. The designs have been based on a review of information on road mitigation from across the world. It is important to note that there is no other road scheme reported in the world has had this level of bat mitigation. Information on mitigation is limited, often lacking monitoring continuity before and after works, but it does provide concrete evidence that a number of species do use green bridges, underpasses and structures over roads.
23. I believe this robust mitigation package will be successful in maintaining safe flight routes for bats to cross the scheme route so that bat populations and favourable conservation status will be maintained.
24. Specific bat crossing mitigation is proposed at Madbrook, Chalford, Wellhead Springs, Bere's Mill, Bratton Road, Bitham Brook and Shallow Wagon Lane.
25. They will comprise of:
 - Green bridge at Chalford with hedgerows and other planting reinstated on top of it to maintain flight routes.
 - Gantry structures over the road acting as flight guides to maintain bats at a safe height above traffic at remainder of crossings
 - Underpasses to direct the bats under the road

- 4m high fencing to raise the flight height of bats approaching the road
- Graded height of planting of up to 6m high trees to lead bats up onto gantries
- 2m high solid board fencing to shield flight corridors from car headlights
- 1m high Bollard lighting to prevent light sensitive low flying bats from flying within traffic height beneath gantries and to prevent them from entering Chalford tunnel.
- At Madbrook Roundabout a bat flight route will be unlit with approaching drivers being alerted by illuminated road studs, light up alert signs and highly reflective unlit road signs.

Foraging Areas

26. New hedgerows and other planting will create foraging areas to mitigate for losses of hedges and trees as a part of this scheme and help mitigate towards loss of grassland.

Construction Management Plan

27. During construction fencing clad with camouflage netting will be installed across the works on the bat crossing points every night.

Monitoring plan

28. A detailed monitoring plan has been compiled to determine baseline data before works, monitor during works and for five years after construction.