



# High Speed Rail (West Midlands - Crewe)

## Environmental Statement

### Volume 5: Technical appendices

CA2: Colwich to Yarlet

Ecology register of local level effects (EC-016-002)



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## Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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A report prepared for High Speed Two (HS2) Limited:

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# 1 Introduction

- 1.1.1 This document is an Appendix to the ecological assessment. Table 2 provides a summary of anticipated local/parish level adverse effects on ecological receptors arising from the construction and operation of High Speed Rail (West Midlands – Crewe) for the Colwich to Yarlet community area (CA2).
- 1.1.2 This document should be read in conjunction with:
- Volume 2, Community area reports;
  - Volume 3, Route-wide effects assessment;
  - Volume 4, Off-route effects assessment; and
  - Volume 5, Appendices.
- 1.1.3 See Volume 5, Appendix EC-001-000 and the Ecology Map Book (Map Series EC-01), for ecological designated sites, and Appendices EC-017-001 to EC-017-005 for Habitats Regulations Assessment screening reports.
- 1.1.4 In addition, the ecological baseline data used for the ecological assessment is set out in Background Information and Data (BID)<sup>1</sup>, (see BID-EC-002-000 to BID-EC-014) and the BID Ecology Map Books (Map Series EC-02 to EC-12) showing habitats and species recorded along the proposed route. The full list of ecological baseline data reports is as follows:
- Ecological baseline data - phase 1 habitat survey (Background Information and Data: BID-EC-002-000);
  - Ecological baseline data - protected and or notable flora (Background Information and Data: BID-EC-003-000);
  - Ecological baseline data - national vegetation classification and ancient woodland (Background Information and Data: BID-EC-004-000);
  - Ecological baseline data - hedgerows (Background Information and Data: BID-EC-005-000);
  - Ecological baseline data - river habitat, river corridor, and ditch surveys (Background Information and Data: BID-EC-006-000);
  - Ecological baseline data - amphibian and pond surveys (Background Information and Data: BID-EC-007-000);
  - Ecological baseline data - reptiles (Background Information and Data: BID-EC-008-000);
  - Ecological baseline data - breeding and wintering birds (Background Information and Data: BID-EC-009-000);

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<sup>1</sup> HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Background Information and Data*, [www.gov.uk/hs2](http://www.gov.uk/hs2)

## Appendix EC-016-002

- Ecological baseline data - otter and water vole (Background Information and Data: BID-EC-010-000);
- Ecological baseline data - hazel dormouse (Background Information and Data: BID-EC-011-000);
- Ecological baseline data - bats (Background Information and Data: BID-EC-012-000);
- Ecological baseline data - white clawed crayfish and other invertebrate (Background Information and Data: BID-EC-013-000); and
- Ecological baseline data - fish (Background Information and Data: BID-EC-014-000).

1.1.5 Note that baseline data for badger is not made publically available due to the historic persecution of this species.

Table 1: Summary of local/parish level adverse effects arising from the construction/operation of the Proposed Scheme within CA2

CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
CA2	Woodland	An unnamed broadleaved plantation woodland on the north-west side of Tithebarn Farm within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a small woodland 0.6ha (75%) from the excavation of Moreton cutting	Yes
CA2	Woodland	Little Covert – broadleaved plantation woodland within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a small woodland 0.8ha (73%) from the excavation of Moreton cutting	Yes
CA2	Woodland	An unnamed broadleaved plantation woodland belt adjacent to the Trent and Mersey Canal and River Trent within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a woodland 0.2ha (66%) from the construction of Great Haywood viaduct	Yes
CA2	Woodland	Yarlet Wood – broadleaved semi-natural woodland within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a small woodland 0.3ha (43%) from the excavation of Yarlet South cutting	Yes
CA2	Woodland	An unnamed broadleaved semi-natural woodland, north of Upper Hanyards, partially within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a small woodland 0.3ha (75%) from the excavation of Brancote South cutting	Yes
CA2	Woodland	Upper Berryhill – broadleaved semi-natural woodland partially within the land required for the Proposed Scheme	Construction	Loss and fragmentation of a small woodland 0.3ha (75%) from the excavation of Hopton South cutting	Yes
CA2	Grassland	Species-poor semi-improved grassland within the land required for the Proposed Scheme	Construction	Loss and fragmentation of species-poor semi-improved grassland	Yes
CA2	Watercourse	Unnamed minor watercourse within the land required for the Proposed Scheme	Construction	Culverts will result in disturbance to the river corridor. Riparian plants will be unable to colonise these hard engineered sections or disperse along affected sections	Yes
CA2	Water bodies	Ponds throughout the Colwich to Yarlet area that are found, following further survey, to not qualify as	Construction	Partial or complete loss of pond habitats to land required for the Proposed Scheme	Yes



CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
		habitats of principal importance i.e. through presence of notable flora and fauna			
CA2	Bats	Assemblage of common pipistrelle and soprano pipistrelle associated with habitats near Moreton House within the land required for the Proposed Scheme	Construction	Loss of roost sites through the excavation of Moreton cutting	Yes
CA2	Bats	Assemblage of common pipistrelle and brown long-eared bat associated with habitats at Marston within the land required for the Proposed Scheme	Construction	Loss of roost sites through the excavation of Marston South embankment	Yes
CA2	Bats	Assemblage of common pipistrelle bat species associated with habitats at Yarlet within land required for the Proposed Scheme	Construction	Loss of roost sites through the excavation of Yarlet South cutting	Yes
CA2	Bats	Assemblage of common bat species associated with habitats at Yarlet immediately adjacent to land required for the Proposed Scheme	Construction	Loss of foraging habitat located within the land required for the Proposed Scheme likely to be used by two common pipistrelle transitional/ day roosts in two buildings located immediately adjacent to land required for the Proposed Scheme	Yes
CA2	Amphibians	Small populations of smooth newt, common frog and common toad within land required for the Proposed Scheme	Construction	Loss and fragmentation of breeding/foraging habitat and dispersal routes from construction activities	Yes
CA2	Birds	Flocks of golden plover on the River Trent floodplain	Construction	Loss of habitat used by wintering flocks of golden plover from construction of the Trent South and North embankments	Yes
CA2	Birds	Flocks of lapwing on the River Trent floodplain	Construction	Loss of habitat used by wintering flocks of lapwing from construction of the Trent South and North embankments	Yes

CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
CA2	Birds	An assemblage of 32 wintering bird species at Tithebarn Farm	Construction	Low densities of breeding birds are present within and adjacent to the land required for the Proposed Scheme. Loss of habitat from construction of the Trent South embankment	Yes
CA2	Birds	An assemblage of 31 breeding bird species at the River Trent floodplain north-west of Great Haywood	Construction	Low densities of common birds are present within and adjacent to the land required for the Proposed Scheme. Loss of habitat from construction of the Trent South and North embankments	Yes
CA2	Birds	An assemblage of 38 wintering bird species at the River Trent floodplain north-west of Great Haywood	Construction	Low densities of common birds are present within and adjacent to the land required for the Proposed Scheme. Loss of habitat from construction of the Trent South embankment, construction compounds and temporary earthworks	Yes
CA2	Birds	An assemblage of 15 breeding bird species at Upper Hanyards to the west of Ingestre	Construction	Low densities of breeding birds are present within and adjacent to the land required for the Proposed Scheme. Loss of habitat from construction of the Trent North embankment	Yes
CA2	Birds	An assemblage of 31 wintering bird species at Upper Hanyards to the west of Ingestre	Construction	Low densities of common birds are present within and adjacent to the land required for the Proposed Scheme. Loss of habitat from construction of the Trent North embankment	Yes
CA2	Reptiles	Potential populations of grass snake, slow-worm and common lizard within the land required for the Proposed Scheme	Construction	Loss and fragmentation of breeding/foraging habitat and dispersal routes from construction activities	Yes
CA2	Badger	At least four social groups of badger at undisclosed locations across land required for the Proposed Scheme	Construction	Disturbance to setts within 30m and loss of foraging habitat within the land required for the Proposed Scheme will affect the distribution of social group territories	Yes

CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
CA2	Fallow deer	Herds of fallow deer from Cannock Chase and Ingestre Park that disperse across the land required for the Proposed Scheme	Operation	Risk of collision with trains and road vehicles could reduce fallow deer population size	Yes
CA2	European hedgehog	Potential populations using suitable habitats present in Colwich to Yartlet area. There are desk study records of European hedgehog within this area	Construction	Loss of woodland, hedgerow, grassland, scrub and garden habitat for this species within the land required for the Proposed Scheme	Yes
CA2	Brown hare	Potential populations using suitable habitats present in the Colwich to Yartlet area. There are desk study records of European brown hare within this area	Construction	Loss of open arable and grassland habitat for this species within the land required for the Proposed Scheme	Yes

## 2 References

HS2 Ltd (2017), *High Speed Two Phase 2a: West Midlands to Crewe, Background Information and Data, Ecological baseline data - phase 1 habitat survey*, (BID-EC-002-000). Available online at: [www.gov.uk/hs2](http://www.gov.uk/hs2).

HS2 Ltd (2017), *High Speed Two Phase 2a: West Midlands to Crewe, Background Information and Data, Ecological baseline data - protected and or notable flora*, (BID-EC-003-000). Available online at: [www.gov.uk/hs2](http://www.gov.uk/hs2).

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