

**East West Railway Phase 2 – Ecological Compensation Site Mitigation
Bicester, Oxfordshire to Bletchley, Buckinghamshire
East West Rail Alliance on behalf of Network Rail**

**BIG Biodiversity Challenge Award Category: *Habitat Creation: Project of the Year AWARD*
(> 5ha and above)**

Project overview

East West Rail Phase 2 Ecological Compensation Site project is the habitat and protected species mitigation programme facilitating the installation 37km of railway connecting Bicester and Bletchley which is associated with the overall plan to reopen the mothballed Oxford to Cambridge railway line.

What were the biodiversity conditions on site, prior to the enhancement?

Naturally established habitats and species had colonised the mothballed railway. Where vegetation clearance was unavoidable, these losses were offset by advanced creation of Ecological Compensation Sites (ECS). Twenty locations along the route were established, two years in advance of construction works. Previously agricultural land (predominately arable) was transformed into high quality habitat/receptor sites for the fauna and flora whilst remaining connected to the railway and existing landscape. The creation of these sites, which total over 100ha in size, prior to the granting of the Transport Work Act Order, demonstrates the commitment to enhance the biodiversity along the route.

What were the reasons behind this project ?

Recognising the ecological scale of the project and the opportunity to do something different, East West Rail Alliance (EWRA) collaborated with stakeholders to develop a forward-thinking, strategic approach to environmental mitigation. Alongside the requirement to mitigate for the loss of habitats associated with protected species, the EWRA made a commitment, through the Transport Work Act Order (TWAO), for the scheme to deliver 10% Biodiversity Net Gain. This commitment was written into the Conditions of the TWAO making East West Rail Phase 2 the first major rail infrastructure project to be committed to deliver biodiversity net gains.



One of the ponds within our ECS



View across one of our large ECS



What were the biodiversity measures taken? Critical to the development of the Ecological Compensation Sites (ECS) was sharing of information between stakeholders. To do this the Alliance developed a web-based GIS system enabling access to project data whilst providing a detailed understanding of the ecological baseline, risk and mitigation. This allowed the Alliance to develop an approved licensing strategy that included:

- Acquiring land prior to TWAO approval and securing 30-year leases to create and protect ECSs
- Management agreements for 30 years
- Implementing underutilised NE policies
- A dedicated Natural England officer embedded in the project team

This route-wide approach to protected species mitigation realised significant benefits, including:

- Less reliance on traditional translocation effort
- Significantly less fencing (single-use plastic)
- Reduced mitigation programme
- Achieving an improved/neutral impact on great crested newts (GCN) in year 1
- Creating more and better-quality habitats
- Flexible licences that allow immediate site action without amendments
- Improving communication and understanding of Natural England licensing teams, resulting in timely licence determination

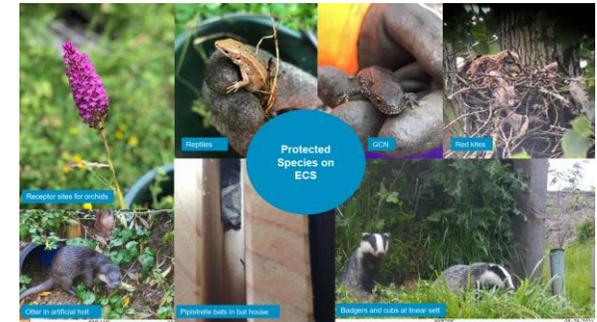
Innovations included:

- Deploying new search methods, including GCN detection dogs
- Linear badger setts in optimal locations, resulting in 100% occupation (70% breeding in year 1) and reduced risk of bTB outbreak
- Transplanting Black Poplar cuttings

This approach resulted in the creation of more, enhanced habitats, maintaining favourable conservation status whilst maximising value for money for the UK taxpayer. In total over 100ha of land has been transformed into ECS, (which include 64 ponds, 17 artificial badger setts, a bat house, over 70 bat boxes and the planting of 150,000 scrub plants and trees) with excess material from the project used to help landscape the areas. These ECS habitats then connect with the lineside vegetation to create a wildlife corridor along which animals can move but also tie into the overarching strategies of Buckinghamshire and Milton Keynes Biodiversity Opportunity Areas.



Swanbourne Bat Structure sat in an ECS, adjacent to mature woodland:



Protected Species present on ECS:

