

The International Union of Railways (UIC) is the worldwide professional association representing the railway sector and promoting rail transport. UIC leads an innovative and dynamic sector, helping our members find opportunities and build success. The purpose of UIC's Ecological Effects of Railways on Wildlife (rEVeRse) project is to understand railway's role in the loss and gain of biodiversity and its habitats in Europe. It will seek to set out how railways can manage land in an ecologically sensitive way, providing solutions and best practice examples.



ECOLOGICAL EFFECTS OF RAILWAYS ON WILDLIFE

REVERSE



UIC is seeking solutions and best practice to manage rail lineside in a way that can help **halt and reverse the loss of biodiversity.**

This poster provides information about Theme 10:
Examples of companies undertaking or commissioning biodiversity research

UNITED KINGDOM

As part of the rEVeRse project, staff at the UK Centre for Ecology & Hydrology used the [Global Biodiversity Information Facility \(GBIF\)](#) to assess the number of Red List species occurring within 1 km either side of the European rail network

THE SOLUTION

In order to value biodiversity and natural assets, it is important for rail companies to understand where species and habitats occur in relation to their land holdings.

As part of the rEVeRse project, staff at the UK Centre for Ecology & Hydrology used the [Global Biodiversity Information Facility \(GBIF\)](#) to assess the number of Red List species occurring within 1 km either side of the European rail network. GBIF is a publicly accessible database of species occurrences across the world and the 1 km buffer was chosen because rail companies' activities are likely to have some kind of benefit or impact within this zone, especially on species that have been Red Listed because they are rare or declining.

Species group	Number of rare species within 1 km either side of the European rail network
PLANTS	
Ferns and their relatives	63
Flowering plants and conifers	391
Medicinal plants	270
INSECTS	
Bees	255
Beetles that live in dead wood	127
Butterflies	206
Dragonflies	89
Grasshoppers, locusts and crickets	139
MOLLUSCS	
Freshwater snails and shellfish	62
Land-living snails and slugs	62
VERTEBRATES	
Amphibians and reptiles	50
Fish (marine)	85
Mammals	87
Total number of species²	2,302

² Data downloaded from the GBIF database in July 2021 (www.gbif.org) for the rail network across the whole of Europe.

(Table 1, Data downloaded from the GBIF database in July 2021 (www.gbif.org) for the rail network across the whole of Europe.)

Outcomes

As shown in the Table above, the lives of more than 2,300 rare species could potentially be affected by European rail companies.

Keywords: Assessment Red List Species



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