

RAIL CORRIDORS CAN BE BOTH A HAZARD AND A LIFELINE FOR ECOSYSTEMS

As rail expands its capacity to meet the need to shift transport away from unsustainable modes of transport, it must provide space for wildlife to thrive.



The International Union of Railways (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 our new project, **Ecological Effects of Railways on Wildlife | rEVeRsE (2020-2023)**.

OUR AIM

Our aim is to improve the understanding of the impact of railways on biodiversity and the opportunities there are to enhance it. Over 3 years, the UIC, with its members, will develop a Biodiversity Action Plan and international guidance for railway operators and infrastructure managers to support, protect and enhance our natural heritage.

BACKGROUND

Railway corridors can be both a hazard and a lifeline for ecosystems. Transport infrastructure can degrade ecosystems through land consumption, landscape fragmentation, barrier effects, emissions and wildlife mortality from collisions with train vehicles. These can threaten the viability of sensitive populations and alter ecosystem dynamics.

However, conversely the green infrastructure associated with rail can also provide an important role in connecting wildlife.

Railways are relatively undisturbed corridors including a mosaic of habitats such as embankments, ditches, and woodland providing linear habitat features for dispersal and foraging for a broad range of species.

These features within many parts of railways infrastructure can link otherwise isolated habitats, bringing about a more joined up network for wildlife as well as for rail users.

Passengers and society are benefiting from the ecosystem services derived from railway infrastructure properties.

Moreover, railway infrastructure sites often serve as a last refugium for rare and endangered plants, which lost their habitat in the intensively used agricultural landscapes.

In the context of the urgent need to decarbonise our transport systems, rail is expected to expand its reach and capacity as we shift from other unsustainable modes of transport to rail for both passenger and freight traffic. Across Europe, existing lines are predicted to get busier and new lines are planned, and with this growth there is risk to biodiversity.

Rail depends upon healthy ecosystems for a broad range of critical services, including soil stabilisation, flood attenuation, visual screening and carbon sequestration. Railways can play a vital role in biodiversity conservation and benefit from the enhancement of these important ecosystem services; however, rail infrastructure managers do not currently fully exploit this opportunity.



PURPOSE

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 a ecologically sensitive way, providing solutions and best practice examples.



OBJECTIVES

The objectives of the project are to:

- ✦ **Avoid** habitat fragmentation and enhance biodiversity conservation on railways by sharing experiences and knowledge;
- ✦ **Identify** how railways threaten the survival of wildlife in Europe, and how these threats can be overcome;
- ✦ **Describe and promote** measures that constitute a railway contribution to the UN SDGs;
- ✦ **Provide** a general understanding of the issues to meet global challenges.

Each participant in the project will have a chance to study biodiversity issues on an international level and benefit from the results.

Studies will be initially conducted across Europe and will aim to improve the future rail network to be as sustainable as possible, particularly in regions where the rate of railway construction is currently high or set to increase.

This interdisciplinary project will link to the UN Sustainable Development Goals (SDGs), particularly SDG 15 (Life on land), and aim to bridge the gap between civil engineers and ecologists, policy and projects, scientists and practitioners.

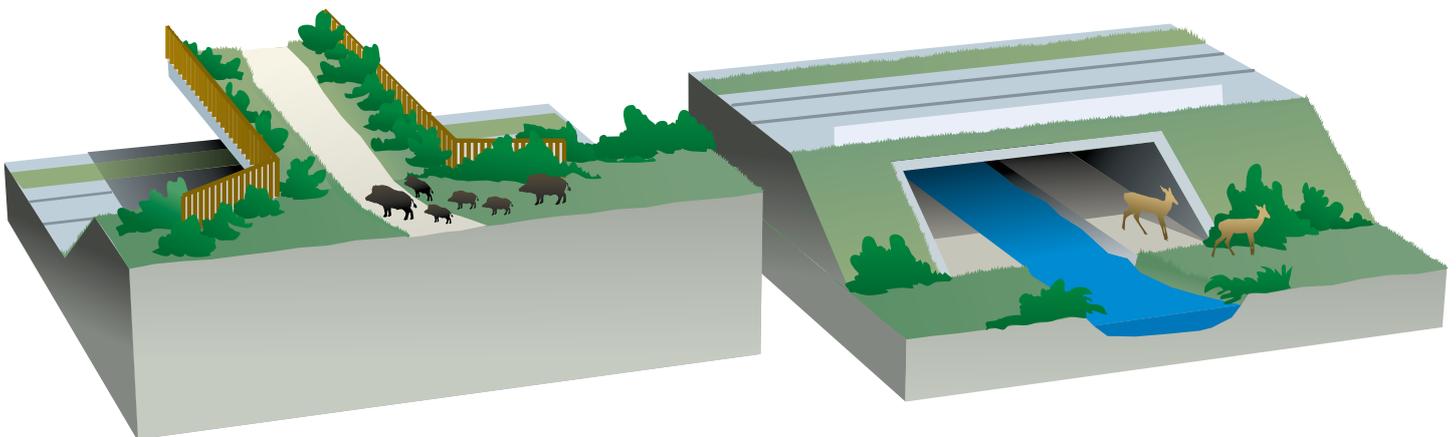
The overall aim of the rEVeRsE project is to enable Europe's railway system to become a global frontrunner and model for a sustainable transport system that takes social, economic and ecological aspects equally into account.



Photo Credit: ÖBB-Infrastruktur AG



Photo Credit: AdobeStock



UIC CONTACT

Pinar YILMAZER
yilmazer@uic.org



INTERNATIONAL UNION
OF RAILWAYS