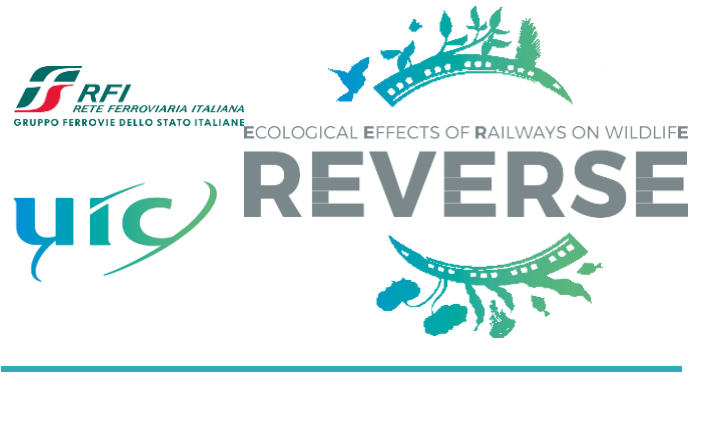


The International Union of Railways (UIC) is the worldwide professional association representing the railway sector and promoting rail transport. UIC leads an innovative and dynamic sector, helping our members find opportunities and build success. The purpose of UIC's Ecological Effects of Railways on 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.



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 2:
“Proactive management of habitat for rare or protected species”

ITALY

The case study concerns the theme of the vegetation management and control under two interconnected aspects, in particular:

- The lack of an internal company procedure to standardize the management practices of vegetation in all the departments present on a national scale in full compliance with the prohibitions imposed by current environmental legislation to protect environment and natural ecosystems.
- The experimentation of innovative methods and systems for the containment of vegetation in order to reduce as much as possible the use of conventional chemical products and to evaluate alternative methods to chemical ones.

THE SOLUTION

In February 2021 RFI issued an internal procedure that provides indications on how to control vegetation in presence of vulnerable areas and protected species.

Chemical methods are forbidden in the following types of area in Italy:

- Vulnerable areas;
- Areas for safeguarding surface and groundwater intended for human consumption;
- Sites of the Natura 2000 Network;
- Protected natural areas;
- Soils in which groundwater is located which can come into contact with the percolating waters of the soil;
- Areas inside railway yards, adjacent to railway stations accessible to the population, railway embankments adjacent to inhabited areas or normally frequented by the population.

Moreover, in order to protect the aquatic environment and drinking water, the human health and natural ecosystems, the company procedure establishes safety distances and methods of distribution of chemical herbicides. Some examples: a creation of an untreated

buffer zone, 10 meters from the riverbed of the water bodies; the use of mechanical methods at a distance of less than 30 meters from the areas normally frequented by vulnerable groups (children, old people). In areas where chemical methods are permitted, they are strictly controlled. In particular it's necessary to control “Type” of chemical product, Correct dosage by reducing the quantities, Destination in the environment, avoiding all substances subject to bioaccumulation, persistence as well as leaching and percolation phenomena.

Moreover, in the new tenders, the equipping of rolling stock with vegetation localization and recognition systems is also encouraged in order to reduce the quantities of chemical products and two different types of innovative methods field tests will be starting in the 2022: physical methods and methods based on the use of eco-sustainable chemicals

Outcomes

Vegetation management practices have been standardized, giving space to experimentation with new alternative methods to traditional chemical ones and new systems for reducing the dosage of chemicals products only where strictly necessary.

Keywords: Vegetation, Chemical



RFI CONTACT Ylenia Abruzzo

landuse@uic.org