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 5: <u>Robust, cost-effective and safe methods for collecting data (to establish a baseline)</u>

GERMANY CASE STUDY

In order to assess the traffic safety of vegetation along railway lines, DB Netz AG - Group subsidiary DB Fahrwegdienste has arranged for a Geographical Information System to be set up to record and manage the flora

THE SOLUTION

This system, "Digitales Management von Geodaten aus den Sparten UPM und Vegetation durch das Fahrwegdienste Fachinformationssystem" (FaFIS)¹ also records invasive alien species.

During regular inspections of the vegetation in the immediate neighbourhood of railway lines, the inspectors collect data on a tablet device. The following species have been recorded: Japanese knotweed (Fallopia japonica), giant hogweed (Heracleum mantegazzianum), ragweed (Ambrosia artemisiifolia), Himalayan balsam (Impatiens glandulifera), tree of heaven (Ailanthus altissima) and ragwort (Senecio jacobaea). A timestamp is automatically set when the process is started. Other information collected includes spatial information, such as route kilometres and regional jurisdiction within Deutsche Bahn.

In addition to the identified species, there is further information on the spatial extent and size of the plants found, which in some cases is supplemented by photos. Furthermore, information on the accessibility of the site for machinery as well as information on legal obligations is provided. These may result from both operational and traffic safety. Finally, in addition to advice on safety measures, suggestions are made on vegetation control measures to be taken.



Keywords: GIS, Flora, inspection

Outcomes

In order to assess the traffic safety of vegetation along railway lines, DB Netz AG - Group subsidiary DB Fahrwegdienste has arranged for a Geographical Information System to be set up to record and manage. This system (Fahrwegdienste Fachinformationssystem, short FaFIS) also records invasive alien species.



landuse@uic.org