

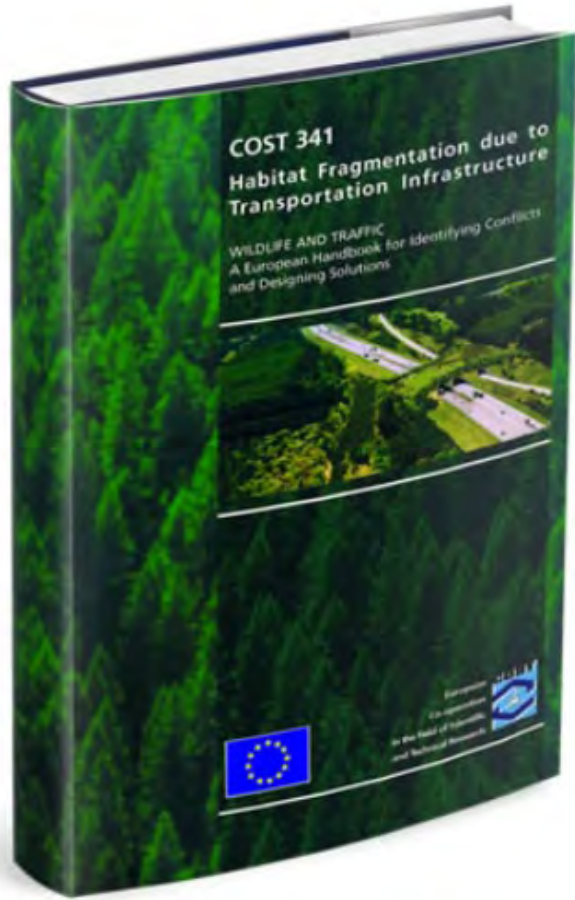
Wildlife & Traffic

A European Handbook for Identifying Conflicts and Designing Solutions

<https://handbookwildlifetraffic.info>

Orig. version 2003

Updates: 2020,21,22



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Wildlife & Traffic

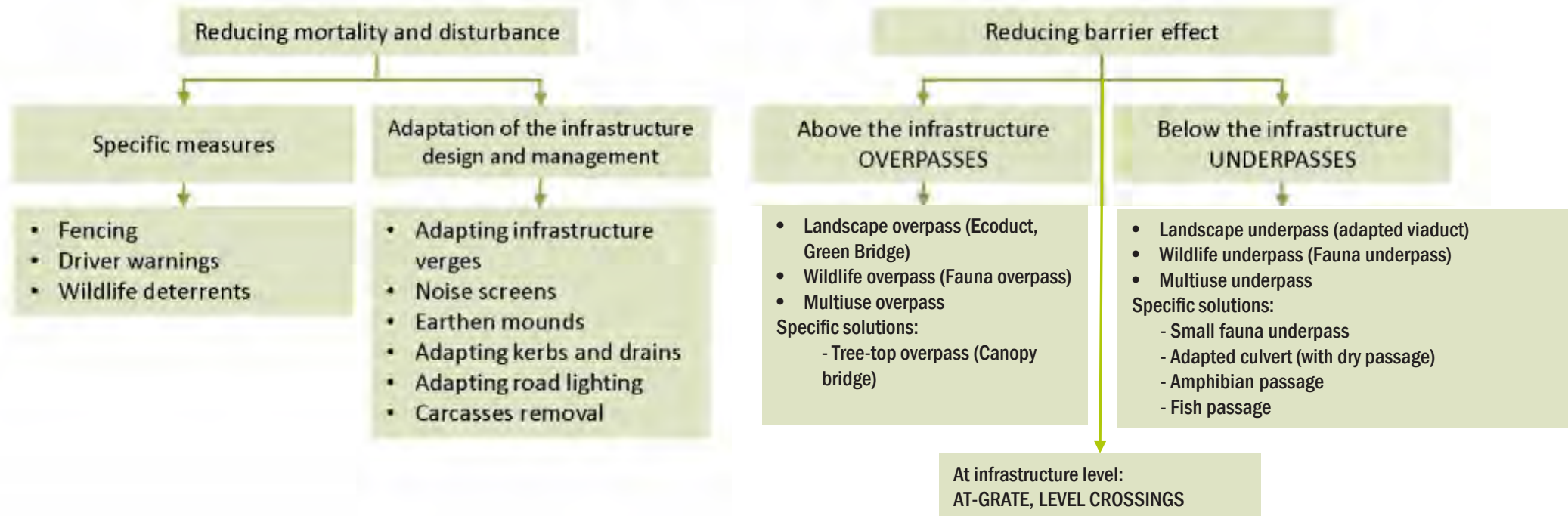
A European Handbook for Identifying Conflicts and Designing Solutions

7 Solutions to reduce transport infrastructure impacts on wildlife

Updated version (2022). Produced in cooperation with the project Horizon 2020 BISON. 'Biodiversity and infrastructure synergies and opportunities for European transport networks'.

Print PDF

Types of measures



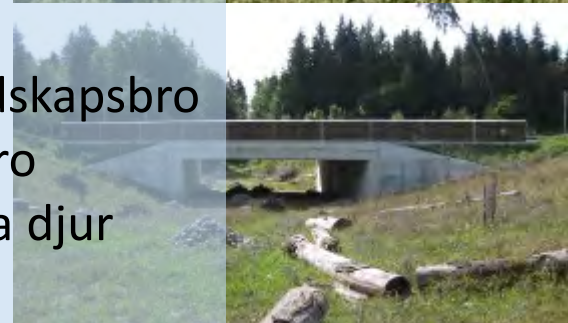
Separate *structure* from *main function*

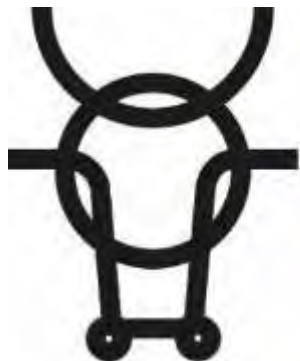
“passage function” provided for over/under/level

- Landscapes / ecosystems
- Wildlife / fauna (multiple species)
- Specific fauna passage (focal species)
- Multi-use passages (human use included)
- [Water passage, stream crossings]



VGU:
Ekodukt / landskapsbro
Faunaport / bro
för medelstora djur
för kräldjur
för vattenlevande djur





BISON

BIODIVERSITY AND INFRASTRUCTURE SYNERGIES AND OPPORTUNITIES
FOR EUROPEAN TRANSPORT NETWORKS

New online handbook in 2023:

- Platform and forum
- Regular updates
- Commenting
- Online, printable, e-book
- Added chapters

The screenshot displays the BISON online handbook interface. At the top left is the 'Biodiversity & Infrastructure' logo with the tagline 'A handbook for action'. To the right is a navigation menu with links for 'Home & search', 'Table of content', 'Glossary', 'Guidelines portal', 'About IENE / BISON', and 'Contact'. Below the navigation is a breadcrumb trail: 'Home > Handbook Wildlife Traffic > 5 Solutions to reduce transport infrastructure impacts on wildlife > 5.5 Wildlife passages > 5.5.1 General recommendations'. On the left side, there is a table of contents with expandable/collapsible icons (+/-) for sections 5.1 through 5.8. Section 5.5 'Wildlife passages' is expanded, showing sub-sections 5.5.1 'General recommendations' (highlighted in green), 5.5.2 'Overpasses', 5.5.3 'Underpasses', and 5.5.4 'At grade fauna passages'. The main content area on the right features the title '5.5.1 General recommendations' with a 'Last update : July 2022' note and icons for document and print. Below the title is a sub-heading '— Wildlife passages as part of a general landscape permeability concept' followed by a paragraph explaining that wildlife passages should be integrated into a general permeability plan to maintain connectivity. A final paragraph states that a permeability plan should be designed for each transport infrastructure project, with the primary objective being to maintain connectivity.

Biodiversity & Infrastructure
A handbook for action

Home & search Table of content Glossary Guidelines portal About IENE / BISON Contact

Home > Handbook Wildlife Traffic > 5 Solutions to reduce transport infrastructure impacts on wildlife > 5.5 Wildlife passages > 5.5.1 General recommendations

- + 5.1 Introduction
- + 5.2 Fencing
- + 5.3 Driver warnings
- + 5.4 Wildlife deterrents
- 5.5 **Wildlife passages**
 - + 5.5.1 **General recommendations**
 - + 5.5.2 Overpasses
 - + 5.5.3 Underpasses
 - + 5.5.4 At grade fauna passages
- + 5.6 Measures to reduce disturbances
- + 5.7 Habitat-related to transport infrastructure (HTI) management
- + 5.8 Invasive Alien Species (IAS)

5.5.1 General recommendations

Last update : July 2022

— Wildlife passages as part of a general landscape permeability concept

Wildlife passages should never be considered as an isolated feature. They should be an integrated part of a general permeability plan to maintain connectivity within and between animal populations and/or ecosystems. A permeability plan emphasises connectivity between habitats at regional or larger scale and considers not only the transport infrastructure but also the distribution of habitats and ecological corridors as well as other potential barriers such as built-up or fenced areas. Wildlife passages can then be regarded as critical elements to connect habitats and enhance the mobility of animals across transport infrastructure.

A permeability plan should be designed for each transport infrastructure project. All connecting elements, such as tunnels, viaducts, underpasses, overpasses, stream and river crossings and culverts designed or adapted to facilitate wildlife movement should be integrated into an assessment of connectivity. Again, the primary objective must be to maintain