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Enhancing Connectivity Improving Green Infrastructure

*Cost-benefit solutions for
forest and agri-environment
A pilot study in Lombardy*

Christine Estreguil

Giovanni Caudullo

Carlo Rega

Maria Luisa Paracchini

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Contact information

Name: Christine Estreguil
Address: Joint Research Centre, Directorate D – Sustainable Resources - Bio-Economy Unit
Via E. Fermi 2749 – TP 261, 21027 Ispra (VA)/Italy
E-mail: christine.estreguil@jrc.ec.europa.eu
Tel.: +39 0332 785422

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Abstract

Enhancing Connectivity, Improving Green Infrastructure

This pilot study over Lombardy addresses the cost-effective spatial development of a well-connected Green Infrastructure (GI) relevant to the integration of forest, agri-environment and regional development policies. The structural continuity and functional connectivity of semi-natural vegetation, as recommended component of the GI, are assessed. Corridors most favourable to species dispersal are mapped and gaps in connectivity are identified. Spatially explicit solutions are then proposed to prioritise improvement actions based on their monetary cost through payments of 'greening' subsidies and their benefit for connectivity. This is demonstrated at micro-scale to benefit pollinators and pest predators and at regional scale to benefit 'connectivity sensitive' terrestrial species.