Enhancing Connectivity, improving Green Infrastructure. Cost-benefit solutions for forest and agri-environment. A pilot study in Lombardy

Original

Availability:
This version is available at: 11583/2658269 since: 2016-11-30T11:28:59Z

Publisher:
Publication Office of the European Union

Published
DOI:10.2788/774717

Terms of use:
openAccess
This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

(Article begins on next page)
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

2016
This publication is a Science for Policy report by the Joint Research Centre, the European Commission’s in-house science service. It aims to provide evidence-based scientific support to the European policy-making process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

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

JRC Science Hub
https://ec.europa.eu/jrc

JRC 102149
EUR 28142 EN


© European Union, 2016

Reproduction is authorised provided the source is acknowledged.

Printed in xxx (country name)

How to cite: Christine Estreguil, Giovanni Caudullo, Carlo Rega, Maria-Luisa Paracchini; Enhancing Connectivity, Improving Green Infrastructure; EUR28142 EN; doi: 10.2788/170924

All images © European Union 2016

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.