

STEP

AT A GLANCE

Title: Status and Trends of European Pollinators

Instrument: Collaborative project: Medium-scale focused research project, FP7

Total Cost: 4.801.665 €

EC Contribution: 3.499.994 €

Duration: 60 months

Start Date: 01/02/2010

Consortium: 20 partners from 16 countries

Project Coordinator: Dr Simon G. Potts, University of Reading, UK

Key Words: pollinators, pollination services, environmental change, conservation, sustainable management of biodiversity.

Website: <http://www.step-project.net>



THE CHALLENGE

Declines in pollinators are reported throughout Europe and this includes the loss of unmanaged pollinators such as many wild bees, hoverflies, butterflies and other insects, as well as managed honeybees. Several causes of the observed losses of pollinators have been documented in case studies, yet it is unclear which are the most important drivers of decline, or how these drivers interact together. Most European crops, and the majority of wild flowering plants, rely on insect pollination, and this service is worth ~€14 billion to European agriculture each year. Given the continued loss of pollinators, it is essential to understand the consequences for food production and food security, the livelihoods of people who work with pollinators and their products, and also the wider implications for the environment. Most importantly we are just beginning to understand how we can manage our landscapes to ensure that pollinators can be conserved and sustainably managed to safeguard pollination services now and under future global change.

PROJECT OBJECTIVES

STEP will document the nature and extent of pollinator declines, examine functional traits associated with particular risks, develop a Red List of endangered European pollinators and lay the groundwork for future pollinator monitoring programmes. We will also assess the relative importance of potential drivers of such change, including climate change, habitat loss and fragmentation, agrichemicals, pathogens, alien species, light pollution, and their interactions. We will measure the ecological and economic impacts of declining pollinator services and floral resources, including effects on wild plant populations, crop production and human nutrition. STEP will review existing and potential mitigation options, providing novel tests of their effectiveness across Europe.



METHODOLOGY

Using a combination of laboratory and modelling approaches, complemented by spatially-replicated campaigns of field research and synthesis workshops, STEP will build upon on existing datasets and models to fill gaps in current knowledge. STEP will integrate findings into a policy-relevant framework, creating Evidence-based Decision Support tools. We will also establish communication links to a wide range of stakeholders across Europe and beyond, including policy makers, beekeepers, farmers, academics and the general public. Taken together, our research programme will make major steps towards improving our understanding of the nature, causes, consequences and potential mitigation of declines in pollinator services at local, national, continental and global scales.

EXPECTED RESULTS

Two main types of output will come from STEP. The first will be a portfolio of clear and systematic documentation of the current state and future trends of European pollinators and the causes of decline and the consequences for society and the environment. The second set outputs will relate to tools and strategies aimed at halting the loss of pollinators, and reversing declines where possible. These outputs will include a European Red List of endangered bees which can be used to help identify conservation priorities, and a framework for monitoring pollinators across Europe. Other outputs will include new landscape management options to provide good quality bee habitat and best practice recommendations for farmers and land managers to help conserve pollinator communities. STEP also plans to develop a decision support tool to aid decision makers in taking pollinators into account when developing new policies and practices. Finally STEP will produce a wide range of multimedia materials in the form of scientific papers, a book, websites, specialist guides and workshops to inform a wide range of stakeholders about pollinators. Our target audience will include the public, research scientists, beekeepers, conservationists, farmers, policy advisors, and industry.

PROJECT PARTNERS	
University of Reading, UK (coordinator)	Lund University, Sweden
Helmholtz Centre for Environmental Research – UFZ, Germany	Spanish Council for Scientific Research, Spain
Swedish University of Agricultural Sciences, Sweden	University of Tartu, Estonia
Stichting Dienst Landbouwkundig Onderzoek (Alterra), Netherlands	PENSOFT Publishers, Bulgaria
Aarhus University, Denmark	University of Bern, Switzerland
University of Leeds, UK	University of Novi Sad, Serbia
University of Bayreuth, Germany	University of Mons, Belgium
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Federal Department of Economic Affairs, Switzerland	University of Pisa, Italy
Finnish Environment Institute, Finland	University of the Aegean, Greece

