

VALUES AND DEPENDENCE OF SOCIETY ON POLLINATORS

## Introducing the VALOR project

Systems-based approach to better understand the impacts of pollinator shifts from flower to fork





### THE PROJECT

VALOR is a Horizon Europe research project that aims to co-develop and demonstrate a systems-based approach to understanding, measuring and responding to changes in the benefits that pollinators provide to society and the economy.

## BACKGROUND



There is growing evidence of a localised but significant pollination service deficit in crop pollination

Other communities may be approaching tipping points as **key species decline**  This **impacts the wider ecosystems** and ecosystem services, with **consequences for human societies** 

### APPROACH

VALOR adopts an interdisciplinary and **multi-actor systems-based approach**, designed to **capture the full chain of direct and indirect impacts of pollinator shifts**, from flowers, to ecosystems, crops, farm businesses, societies, value chains, and human health and well-being.

### **APPROACH**

VALOR's Systems Based approach



### **APPROACH**

VALOR bases its approach on the specific needs of seven focal regions across Europe, where the impacts of pollinator shifts on ecosystems, farm businesses and local communities will be explored through primary research and modelling.

- 1. Güímar Valley, Tenerife
- 2. Guadalquivir Productive Plains
- 3. Baden-Württemberg Living Lab, Germany
- 4. Southern Małopolska Upland & the Vistula River Valley Living Lab, Poland
- 5. South-Limburg, Geuldal Valley Living Lab
- 6. Kent apple Orchard Living Lab, United Kingdom
- 7. South Scania, Sweden



### **OBJECTIVES**



Co-develop a better understanding of stakeholder knowledge needs around pollinators



Explore the consequences of pollinator loss through value chains

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Better understand the dependence of society and the economy on pollinators



Forecast the resilience of pollinator networks and human benefits under future conditions



Measure and model the cascading impacts of plant-pollinator networks on ecosystems and human well-being



**Co-develop tools to engage and empower actors about pollinator conservation** 

### STRUCTURE

VALOR is built around stakeholder engagement at both the regional level through our focal regions and the international level through our steering committee. VALOR will continue to **engage** with these actors throughout the project (WP1) while conducting **high-quality quantitative and qualitative research** over four empirical work packages (WP2, WP3, WP4, WP5). The information synthesised from this will then be used to explore the **resilience of pollinators** & pollination service benefits under future scenarios (WP6) and develop a series of tools for engaging actors with pollinator management (WP7).

\* WP = work package

### **STRUCTURE:** Work packages



To achieve its ambitious goals VALOR aims to produce specific results, **exploring the impacts of pollinator shifts** on ecosystems, farm businesses and local communities, and **offering new tools** for landowners, businesses and policymakers.

#### Systems-based research and scenarios

exploring the links between drivers of land use change, pressures on pollinators and the impacts on human wellbeing, and multi-actor responses to these declines across whole landscapes and crop systems.



#### 2 Methodologies and resources to identify vulnerable protected and non-protected areas

where there are the greatest risks of cascading pollinator loss, including their impacts on societal values and wider biodiversity.



# **3** Metrics, tools and databases

to link pollinators with existing farm and non-farm business and social performance metrics, and greatly enhanced systems for measuring natural capital accounts.



## A framework for using scenarios to building resilience,

both of pollinators to pressures and of society and the economy to pollinator declines, across actors and across scales.



## 5 Insights into the use of pollinator knowledge in policy,

including the transformative effect of exposure to this knowledge and the development of an interdisciplinary research agenda to address key knowledge needs.



#### 6 Information on the role of pollinators on non-economic wellbeing,

including the linkages between pollinators, ecosystems and the physical and mental wellbeing of humans.



### LINKS WITH OTHER PROJECTS & INITIATIVES



### **LINKS:** Legacies





### CONSORTIUM

VALOR is a multi-actor project, developed by a collaboration of **universities**, **public research institutions, and science communication experts**, all of whom will have a leading role in multiple tasks, **and the VALOR steering committee**, a group of policymakers, NGOs and businesses from multiple sectors who have committed to directly co-develop tasks in the project and will act as early adopters of project findings.

## CONSORTIUM



### **16 PARTNERS**



### **12 COUNTRIES**

## CONSORTIUM

- University of Reading
- Swedish University of Agricultural Sciences
- Albert Ludwig University of Freiburg
- Jagiellonian University
- Spanish National Research Council
- Wageningen University
- Lund University
- Diversity of La Laguna
  - University of Natural Resources and Life Sciences

- University of Helsinki
- Pensoft Publishers
- UNEP-WCMC
- European Landowners' Organization

#### **ASSOCIATED PARTNERS**



### **STEERING COMMITTEE**























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