

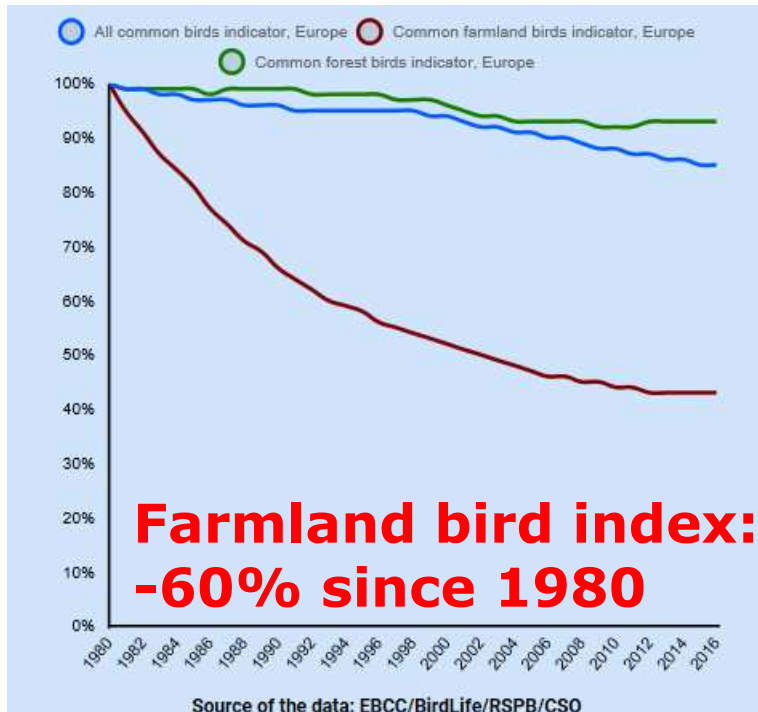







## **7th Symposium of PAN Europe, IBMA and IOBC**

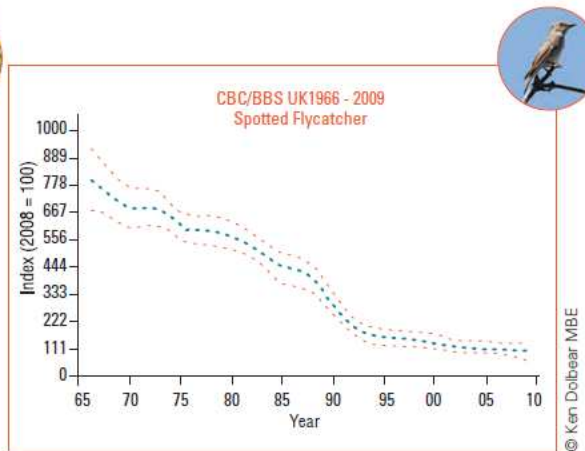
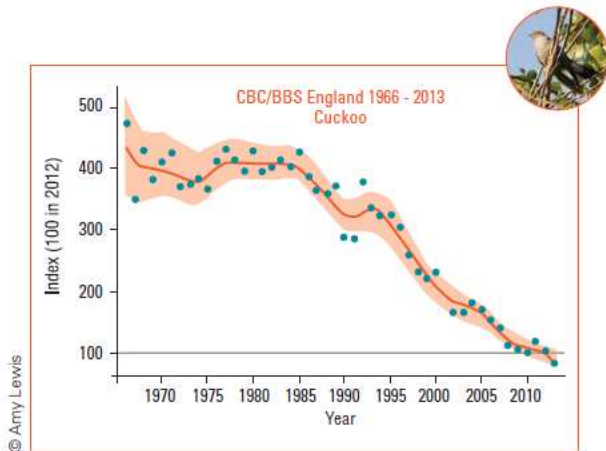
**"Ecological transition starts  
with agronomy, increasing  
IPM uptake and reducing  
pesticide dependency"**

**Andreas Gumbert  
DG Environment  
Unit D1, Land Use and Management**

# Diversity of farmland birds is declining



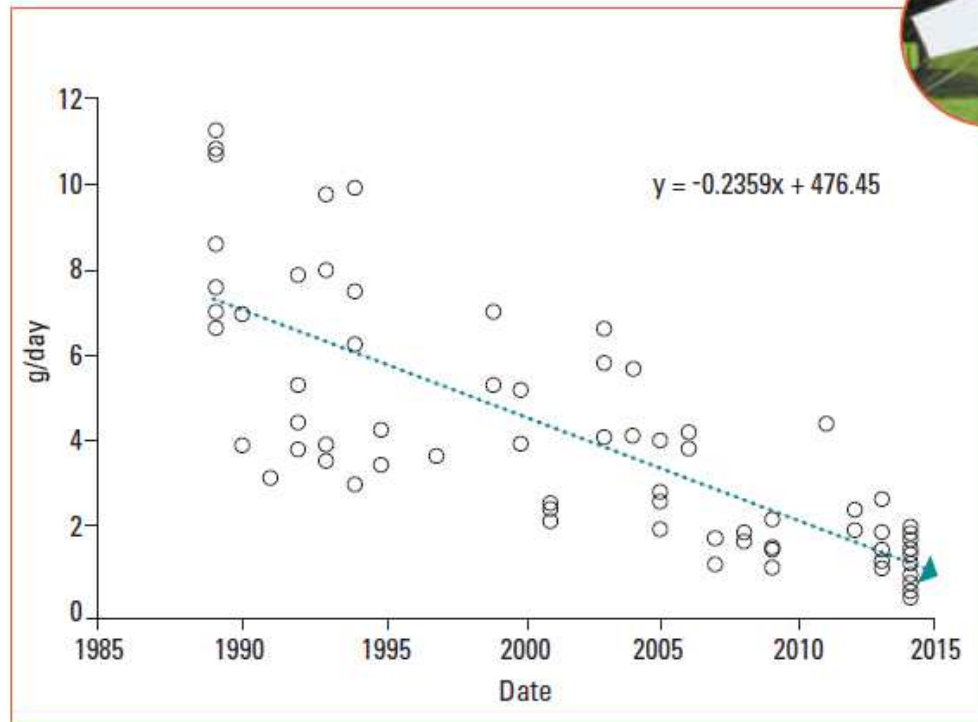
		
Spotted Flycatcher <b>-93%</b>	Grey Partridge <b>-92%</b>	Nightingale <b>-93%</b>
		<b>Insect hunting birds</b> UK trends 1967-2016
Red Backed Shrike <b>-100%</b>	Cuckoo <b>-77%</b>	



Data on population change of cuckoo (top) and spotted flycatcher (bottom), two specialist insectivores that have undergone dramatic declines over the last 50 years. Figures are from the British Trust for Ornithology.



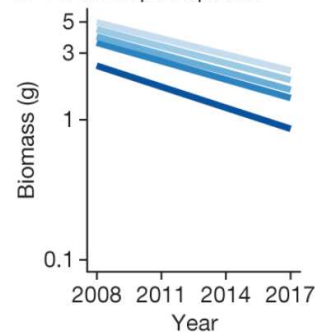
# Loss of insect biodiversity



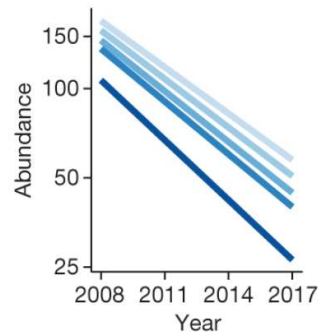
**Overall biomass of insects -76% in the 26-year period from 1989 to 2014**

*Hallman et al. 2017  
German Nature Reserves*

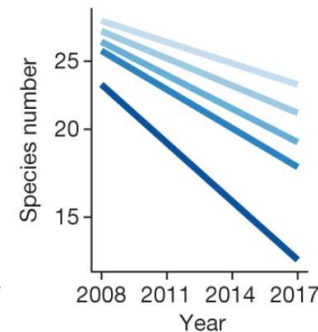
**a** All arthropod species



**Biomass  
-67%**



**Abundance  
-78%**



**Number of species  
-34%**

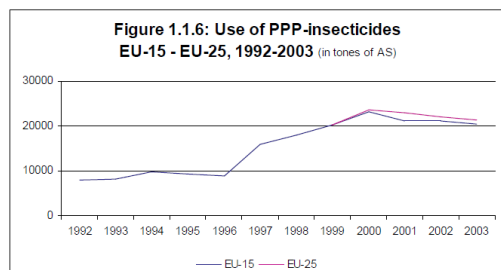
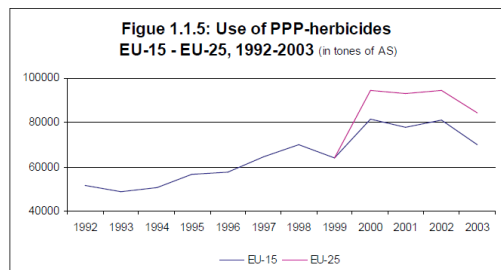
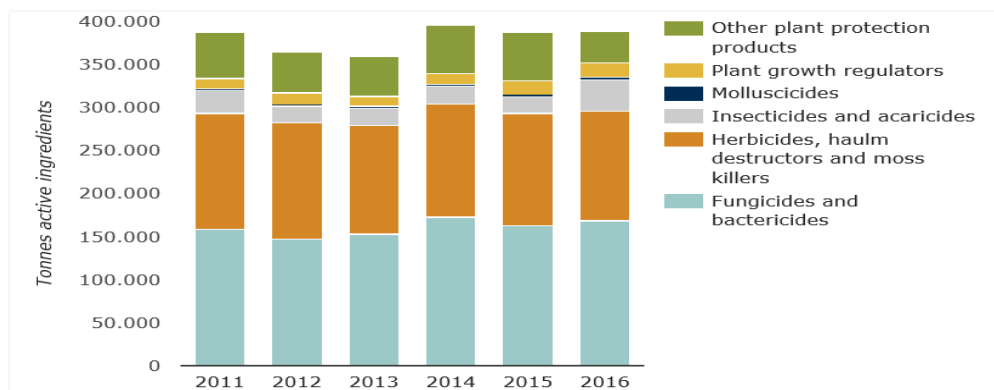
**Losses are higher on intensively used land**

*Seibold et al. Nature 574, 671–674 (2019)  
Data from more than 1 million individual arthropods (about 2,700 species), from standardized inventories taken between 2008 and 2017 at 150 grassland and 140 forest sites in 3 regions of Germany. Grassland data shown.*

# Pesticide risk and use

Total pesticide sales stay constant over recent time but have grown historically

**Figure 1. Total pesticides sales, EU**



Eurostat Statistical Books: The use of plant protection products in the European Union  
Data 1992-2003  
2007 edition

The harmonised risk indicator shows a downwards trend but the number of emergency authorisations is increasing

