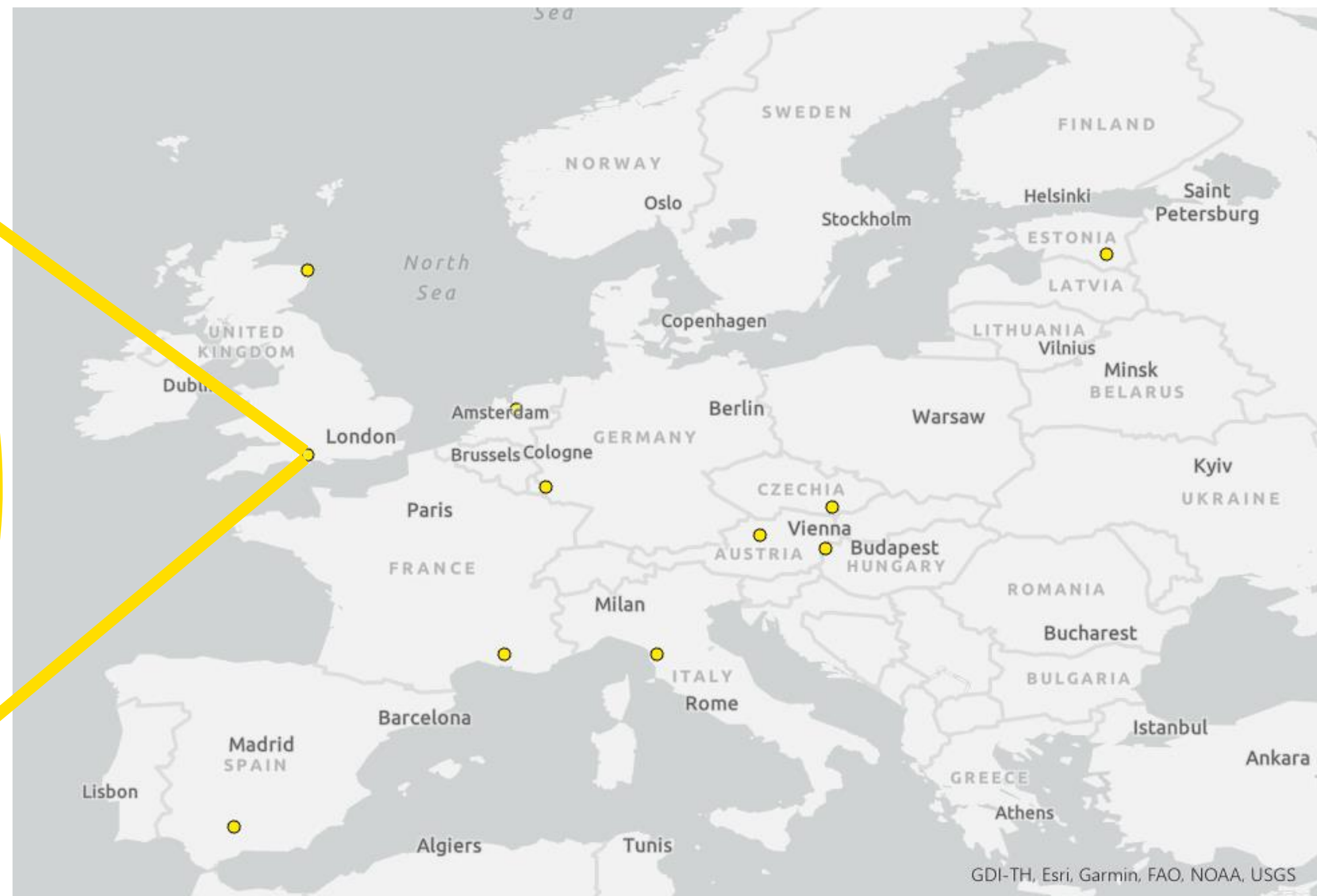
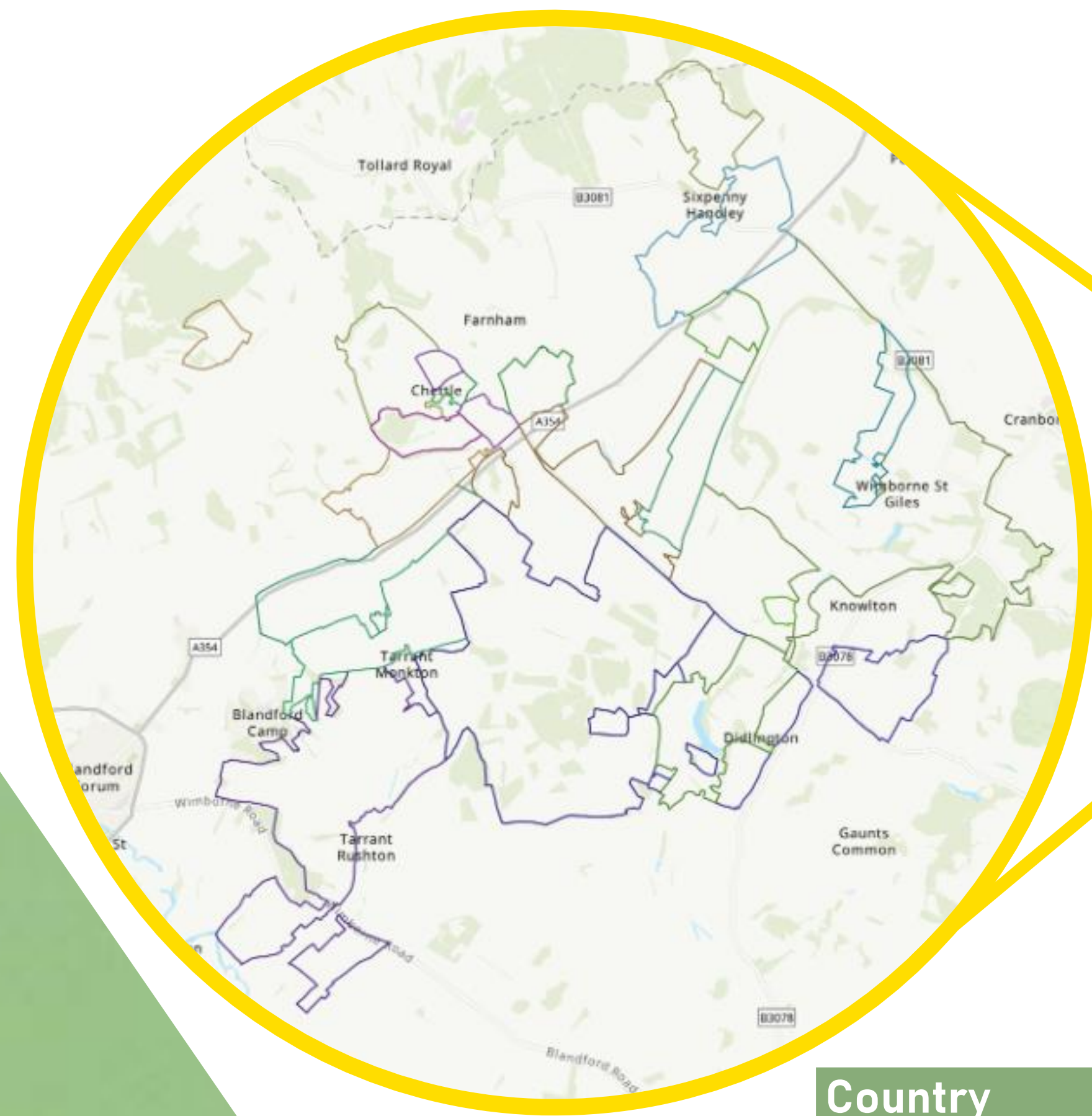




Farmer Clusters – a FRAMEwork for landscape scale conservation on farmed land?

Niamh McHugh^{1*}, Graham Begg², Lisette Salazar³, Youri Martin³, Sarah Vray³

1. Game and Wildlife Conservation Trust, UK, 2. James Hutton Institute, UK, 3. Luxembourg Institute of Science and Technology, Luxembourg



Country	System	# Farm	Area (ha)	Primary interest
Austria	Mixed	6	2870	Vegetation, birds, pollinators
Austria	Grassland	12	ca. 300	Birds and grassland plants
Estonia	Arable/ Mixed	14	3170	Not decided
Spain	Orchard	7	350	Red-legged partridge, reducing soil erosion
France	Orchard	8	ca. 200	Natural enemies, birds
England	Mixed	19	8,000	Barn owls, corn bunting, pollinators, earthworms, soils and arable plants
Scotland	Mixed	4	1153	Soil health, pollinators and arable plants
Italy	Orchard	16	ca. 100-500	Not decided
Luxembourg	Orchard	5	50	Pollinators
Netherlands	Arable	8	500	Biocontrol and soil health
Czech Republic	Mixed	9	2822	Farmland birds

Farmer Clusters

Farmer Clusters are **groups of farmers**, located in the same region, who **work together** to share knowledge, support and motivate one another to **conserve and enhance the biodiversity** and ecological health of their farming landscapes.



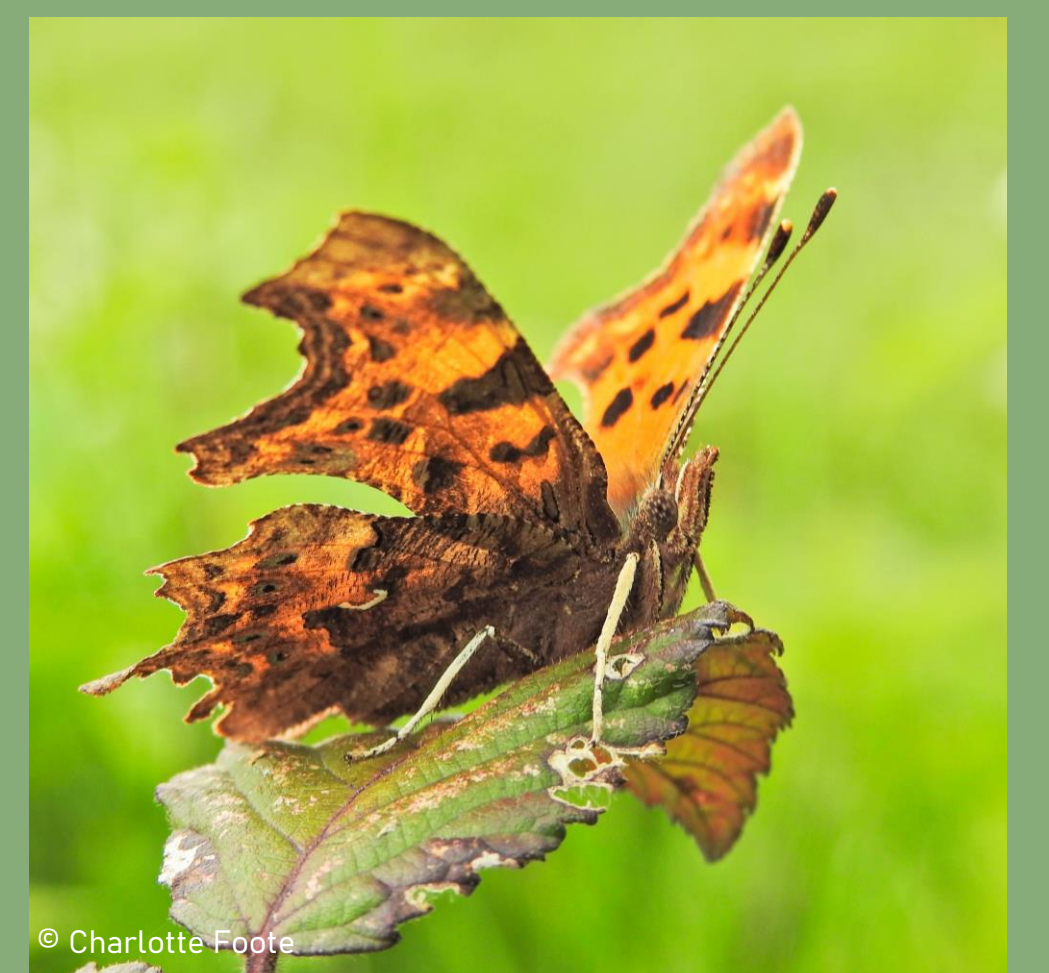
Our aims

The aim of FRAMEwork is to **test and evaluate** the Farmer Cluster concept in terms of potential benefits to biodiversity, social change and economics. The project also aims to provide **technological support** to help Farmer Clusters reach their goals.

Biodiversity Monitoring

Three indicator groups are being monitored scientifically: 1. Farmland birds, 2. Pollinators (including butterflies and bumblebees) and 3. Arable plants

Farmer Cluster groups also participate in monitoring species and species groups which are a focus of their conservation work (e.g. Corn Bunting in England and natural pest enemies in France).



A Common Scientific Sampling Design

Universal monitoring methods were employed on the 11 pilot Farmer Cluster sites in 2022 to collect baseline biodiversity Data. The methods are scaled according to the size of the Farmer Cluster, focusing on either 500m or 1km squares.

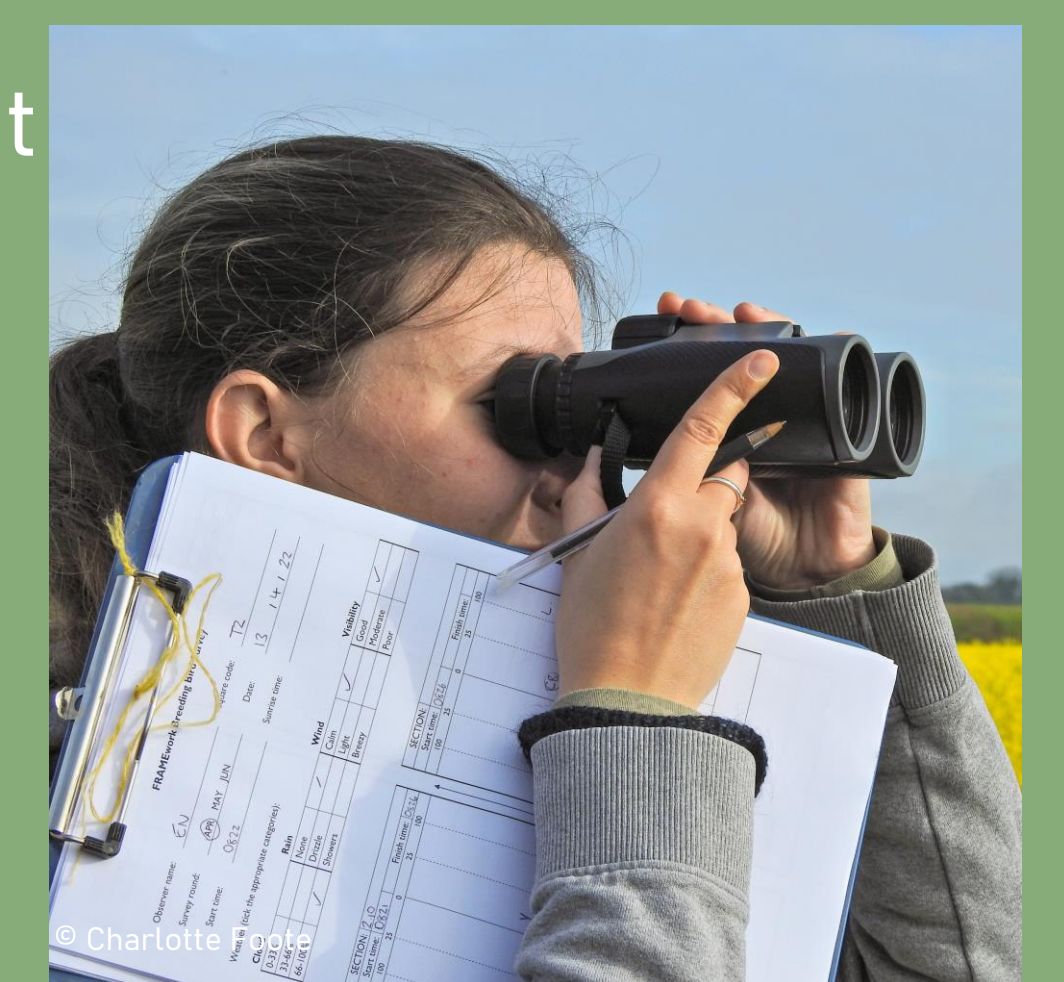
Farmland bird monitoring is conducted along 500m – 1km transects twice a year (early and late breeding season) and all birds seen or heard are recorded.



Pollinator monitoring is conducted 4 times a year (May – August), along 50m transects within our survey squares. Transects represent a range of habitats including herbaceous strips, woody areal and non-permanent crops.

Arable plants are monitored using a modified version of the European EMBAL protocol. Plant surveys are conducted in the same locations as the pollinator surveys, but along shorter transects (20m).

All scientific monitoring will be repeated in 2024 and 2025 to determine biodiversity responses to management changes across the pilot Farmer Clusters.



© Charlotte Foote



This project has received funding from The European Union's Horizon 2020 research and innovation programme under grant No. 862731

