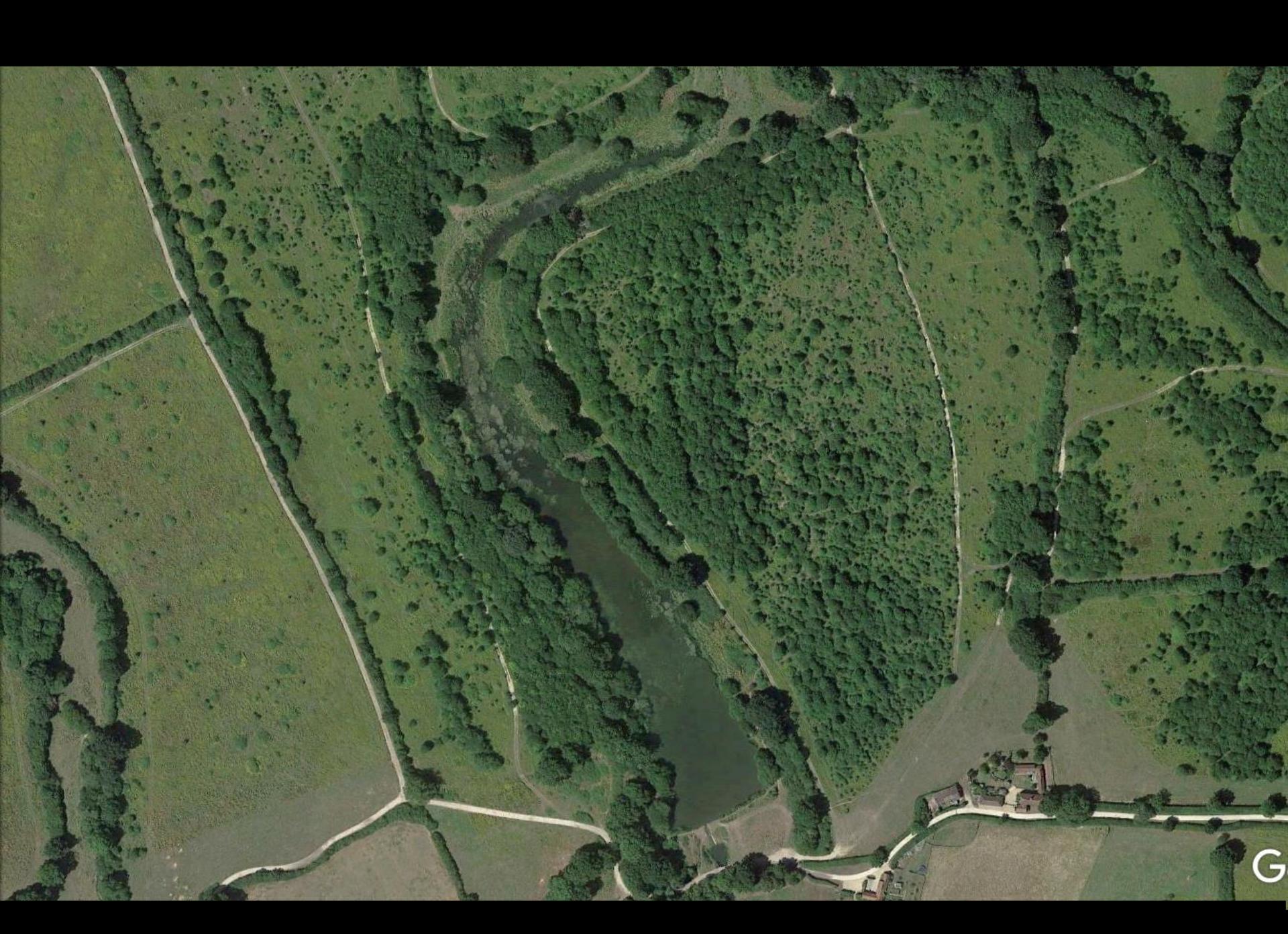


A scenic landscape featuring a river flowing through a forested area, with a dead tree in the foreground on the left.

Rewilding: A climate change solution



G













How does rewilding fit into our farmed landscape?

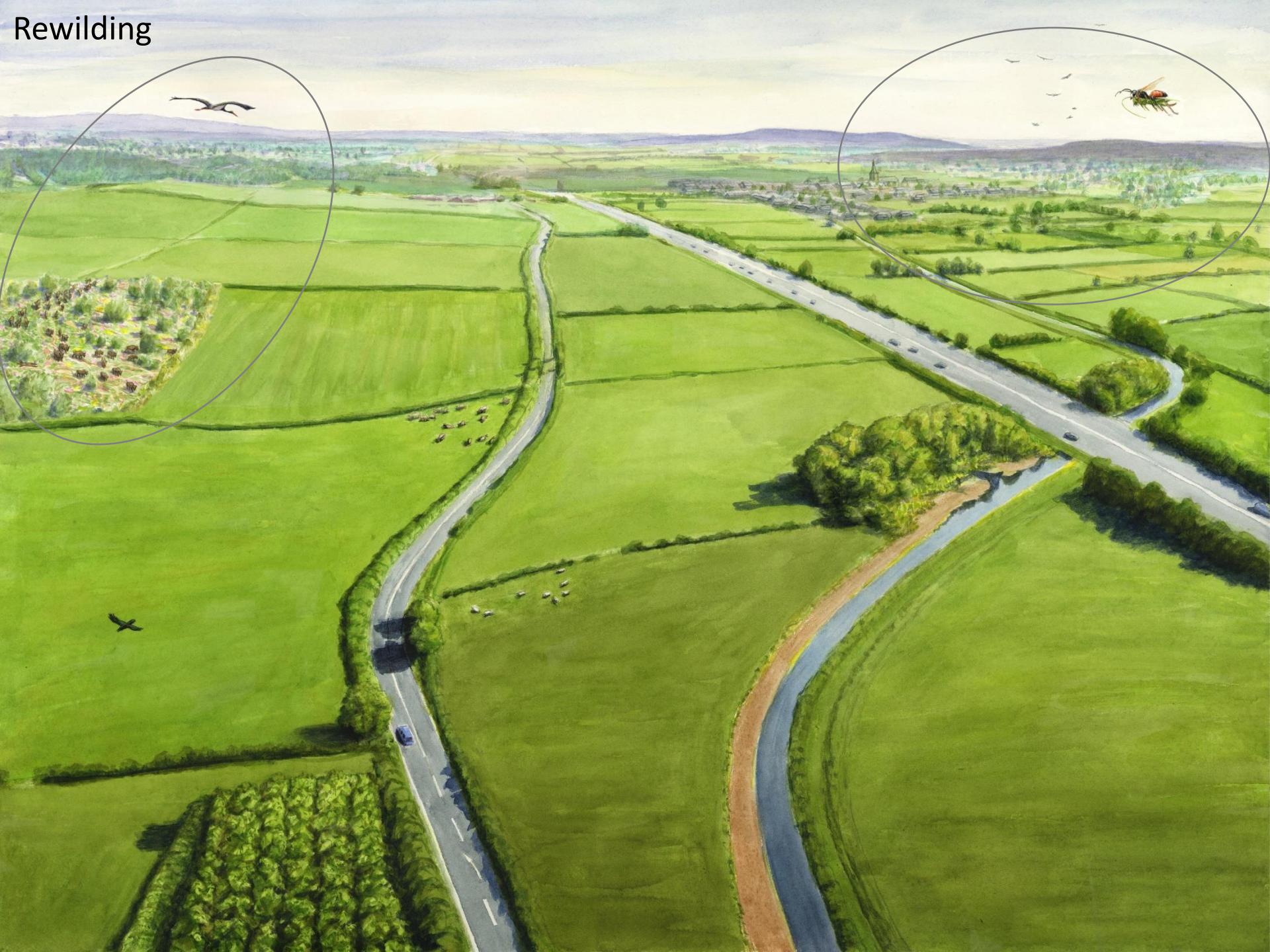
OUR GREEN AND PLEASANT LAND





Jeroen Helmer
jeroen.helmer@ark.eu

Rewilding



Corridors







Green bridges and hedges







3 nightingale territories in this 170 meter hedge



Farming for nature – nectar margins, sacrificial crops, bare earth strips for bird dusting, reservoirs for insects as pollinators and pest control....



PROCEEDINGS B

rspb.royalsocietypublishing.org

Research



Cite this article: Pywell RF, Heard MS, Woodcock BA, Hinsley S, Riddig L, Nowakowski M, Bullock JM. 2015 Wildlife-friendly farming increases crop yield: evidence for ecological intensification. Proc. R. Soc. B 282: 20151740.
<http://dx.doi.org/10.1098/rspb.2015.1740>

Received: 20 July 2015

Accepted: 3 September 2015

Wildlife-friendly farming increases crop yield: evidence for ecological intensification

Richard F. Pywell¹, Matthew S. Heard¹, Ben A. Woodcock¹, Shelley Hinsley¹, Lucy Riddig¹, Marek Nowakowski² and James M. Bullock¹

¹NERC Centre for Ecology and Hydrology, Wallingford OX10 8BB, UK
²Wildlife Farming Company, Bicester OX26 1UN, UK

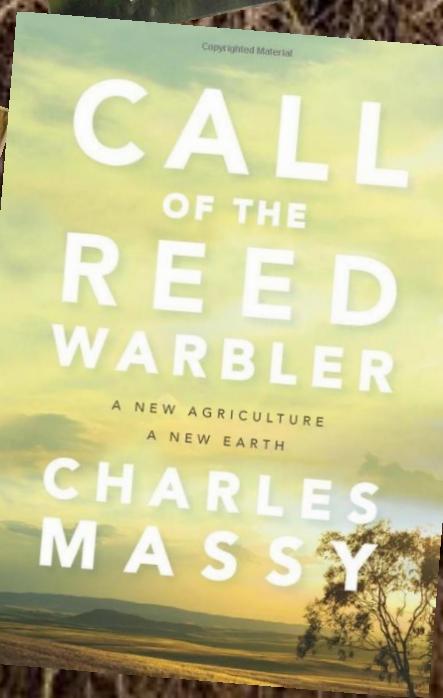
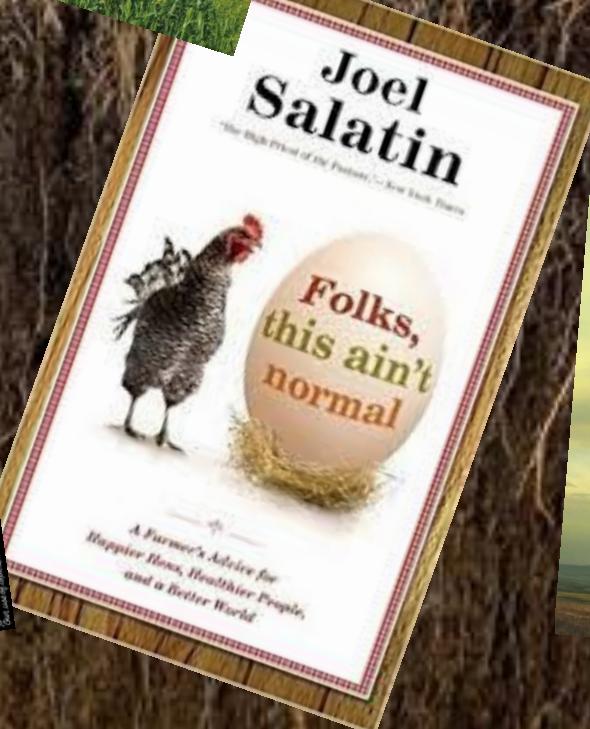
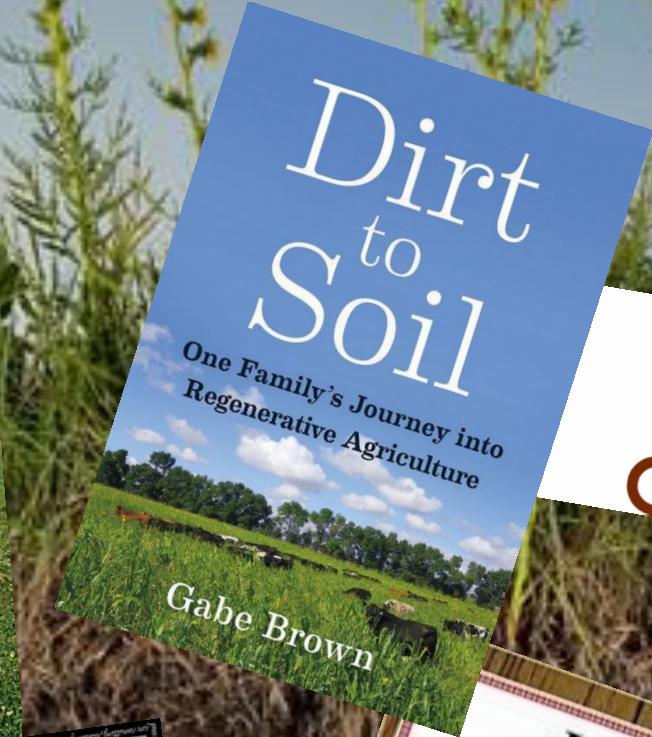
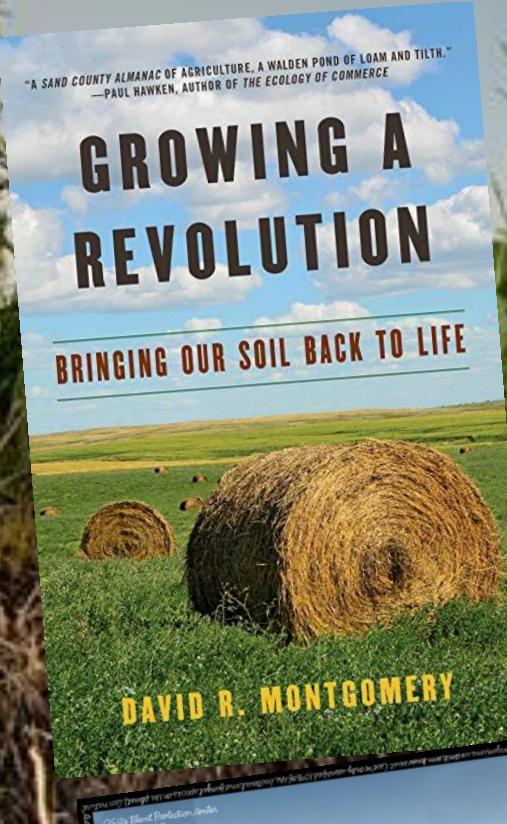
Ecological intensification has been promoted as a means to achieve environmentally sustainable increases in crop yields by enhancing ecosystem functions that regulate and support production. There is, however, little direct evidence of yield benefits from ecological intensification on commercial farms growing globally important foodstuffs (grains, oilseeds and pulses). We replicated two treatments removing 3 or 8% of land at the field edge from production to create wildlife habitat in 50–60 ha patches over a 900 ha commercial arable farm in central England, and compared these to a business as usual control (no land removed). In the control fields, crop yields were reduced by as much as 38% at the field edge. Habitat creation in these low-yield disturbed areas failed to increase yield in the

“...yields at the field scale were maintained—and, indeed, enhanced for some crops—despite the loss of cropland for habitat creation.”



Regenerative farming, conservation farming....







Wood pasture and areas that are “mob-grazed”



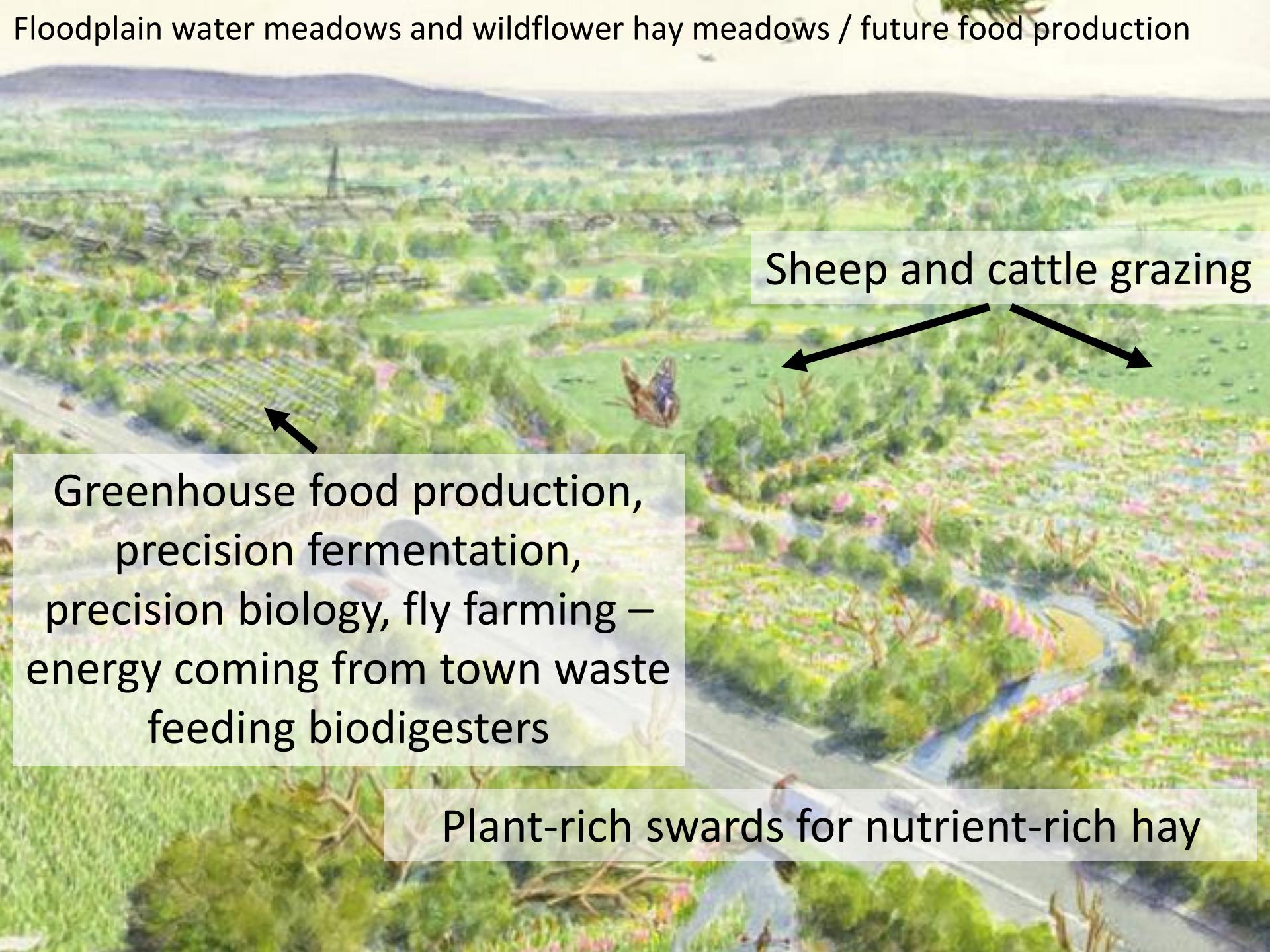




Restoration of wetlands



Floodplain water meadows and wildflower hay meadows / future food production



Greenhouse food production,
precision fermentation,
precision biology, fly farming –
energy coming from town waste
feeding biodigesters

Sheep and cattle grazing

Plant-rich swards for nutrient-rich hay



Woodland, plantations and forests - multi-species plantations



Multi-species plantations





Fully re-connected landscape for farming, nature and people



Continue
reconnecting



MONEY





CO₂ equivalents

peatland 3.6 t/ha/yr



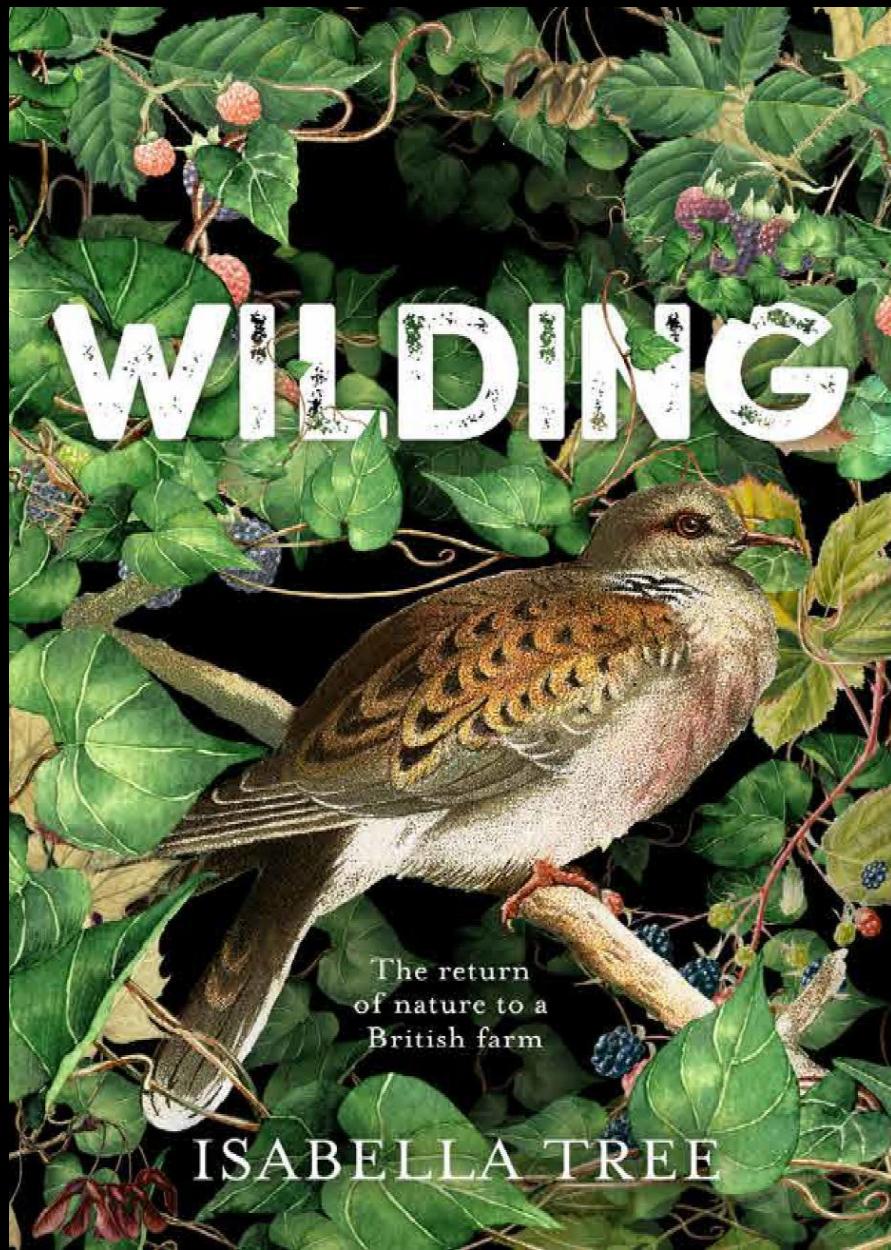
marine 4 t/ha/yr

species-rich grassland
3.6 t/ha/yr

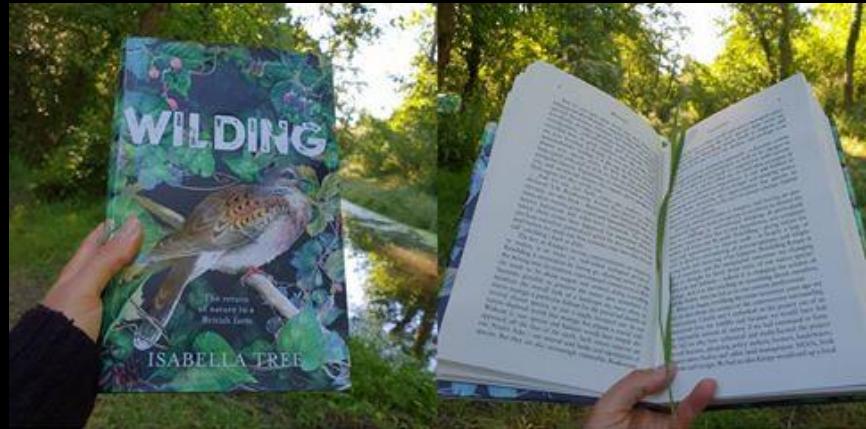
Govt. / polluter pays / net gain
/ carbon credits / bio credits
=> public money for public
goods

trees 12.8 t/ha/yr

wetlands 5.1 t/ha/yr



Thank you



What would the world be, once bereft
Of wet and wildness? Let them be left,
O let them be left, wildness and wet;
Long live the weeds and the wilderness yet.

Gerard Manley Hopkins, 'Inversnaid', 1881