



# Sustainability in UK sheep farming

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# There is no definitive sustainable breed or system



Source: Created by and photos from Jude L. Capper, 2024.



# Sustainability is an economic/environmental/social balance

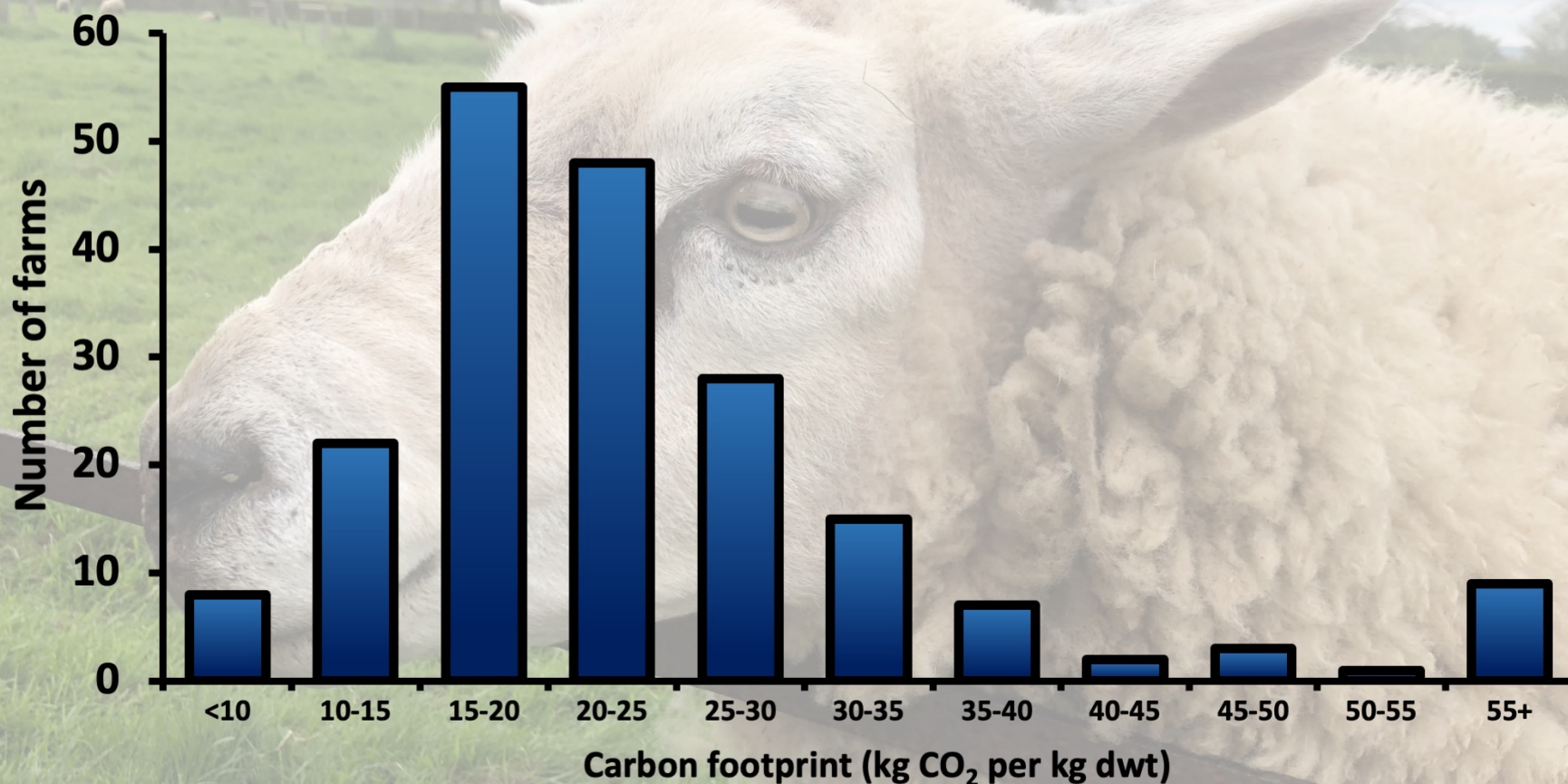


Source: Created by and photo from Jude L. Capper, 2024.





## Carbon footprints of sheep production vary considerably



Source: Created by and photo from Jude L. Capper, 2024. Data from ABP PRISM 2030 First Year Report: <https://abpuk.com/responsibility/prism-2030/>



# Feed choice matters – for performance, profit and planet



Source: Created by and photo from Jude L. Capper, 2024.





# Health and welfare play a key role in sustainability

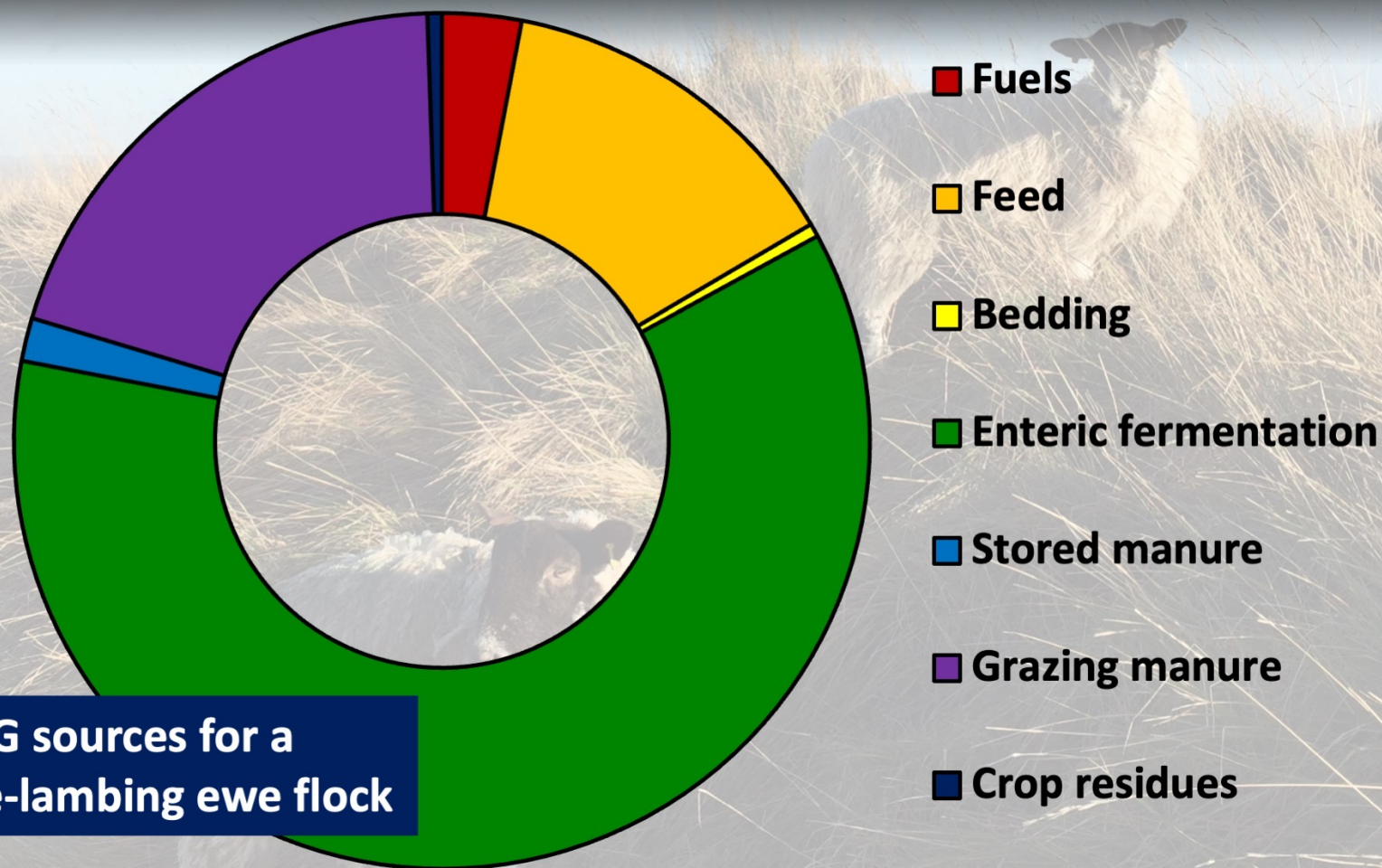


Source: Created by and photo from Jude L. Capper, 2024.





# We need accurate and applicable tools – and results!



Source: Created by and photo from Jude L. Capper, 2024. GHGe depicted are for a late lambing ewe operation using no inorganic fertilizer.





# New research and improved metrics allow us to better quantify environmental impacts

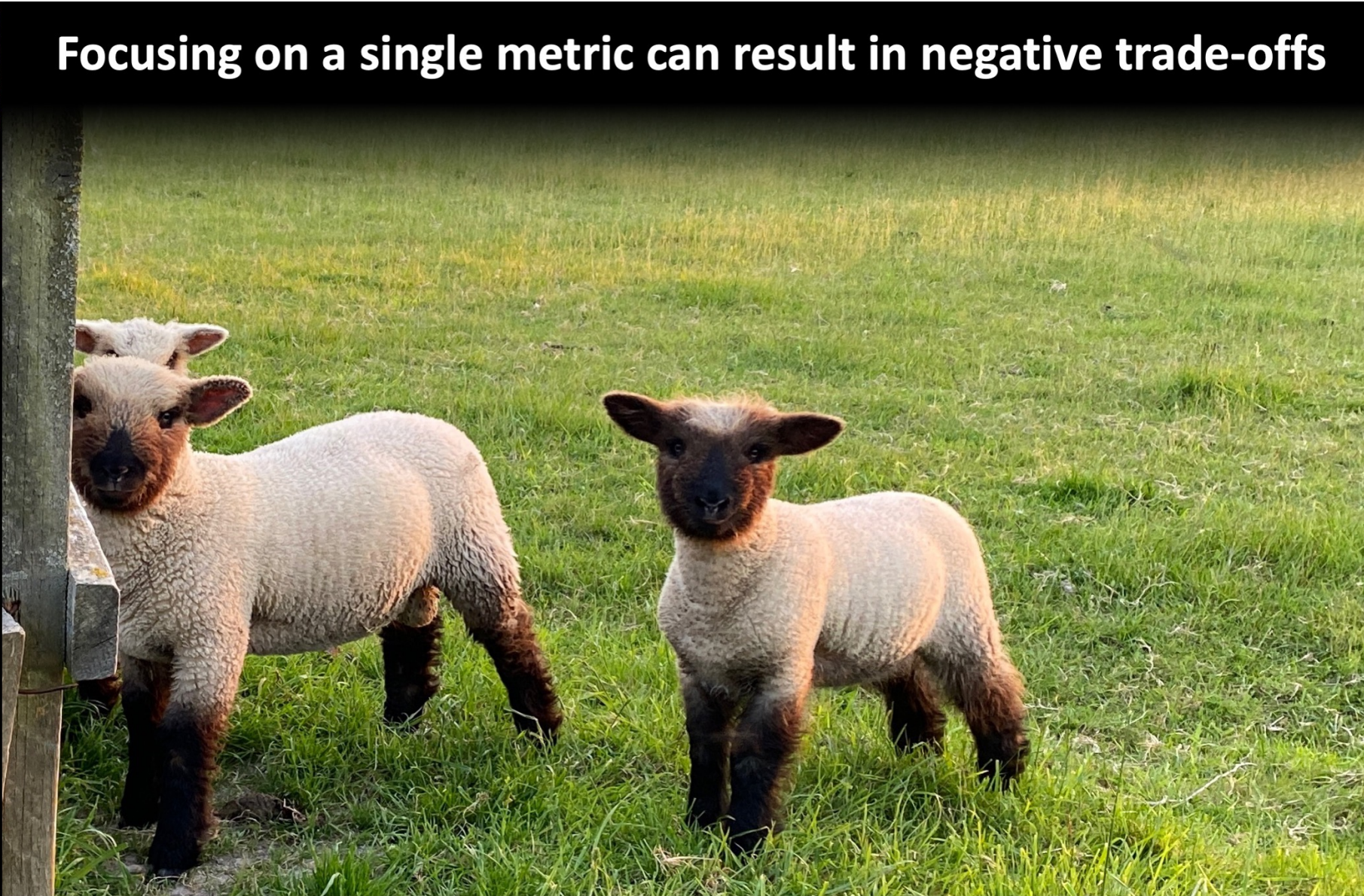


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# Focusing on a single metric can result in negative trade-offs



Source: Created by and photo from Jude L. Capper, 2024.



# Can we grow human food and fibre crops everywhere?



Source: Created by and photo from Jude L. Capper, 2024.





# 65% of UK land is unsuitable for growing arable crops

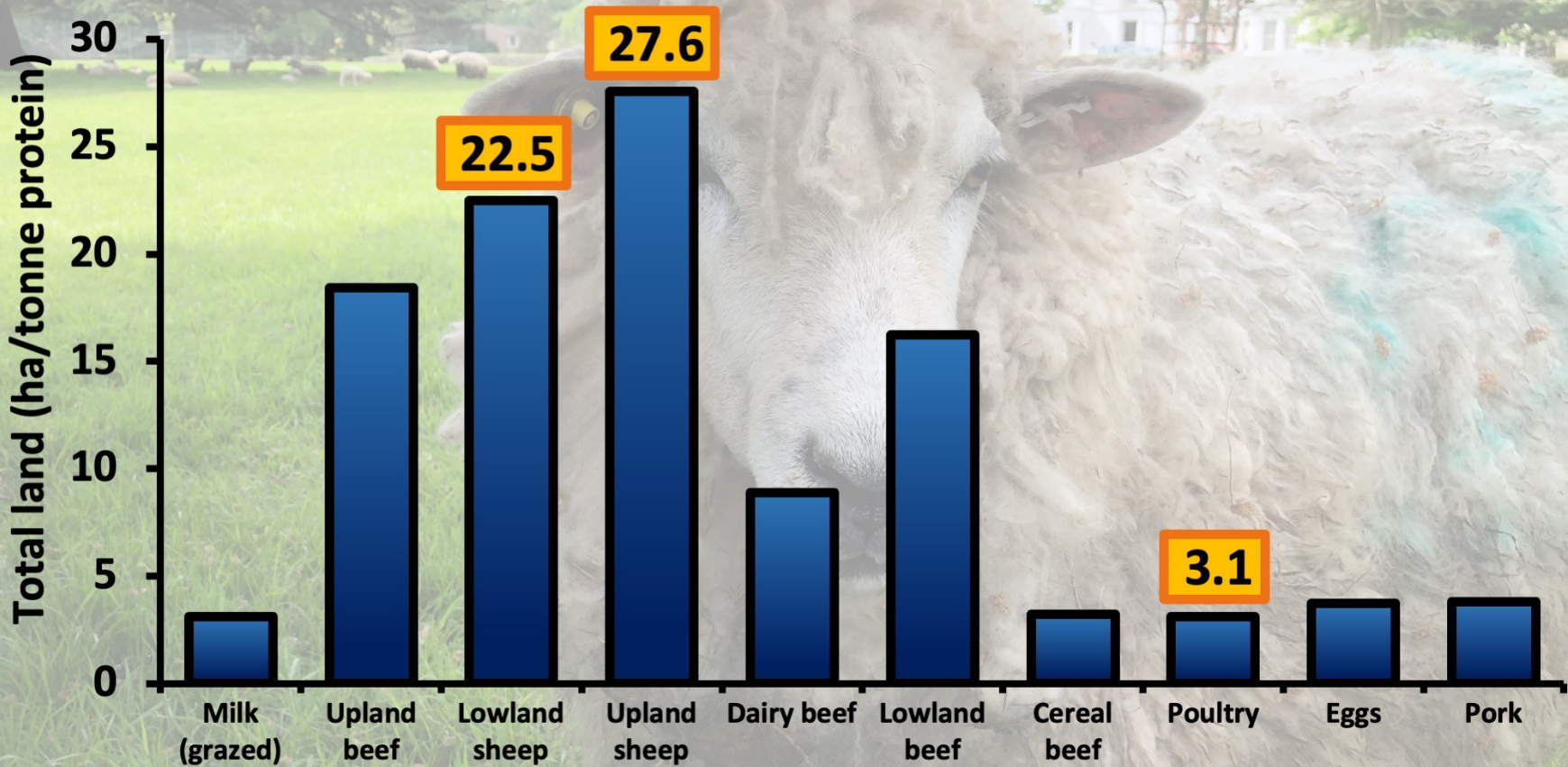


Source: Created by and photos from Jude L. Capper, 2024. Grazing land includes temporary grass on arable land (6% of total), land used for outdoor pigs or non-agricultural purposes not shown (1.7% of total). Data from DEFRA. 2019. Farming statistics - provisional crop areas, yields and livestock populations at 1 June 2019 – United Kingdom. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/837834/structure-jun2019prov-UK-10oct19.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/837834/structure-jun2019prov-UK-10oct19.pdf)





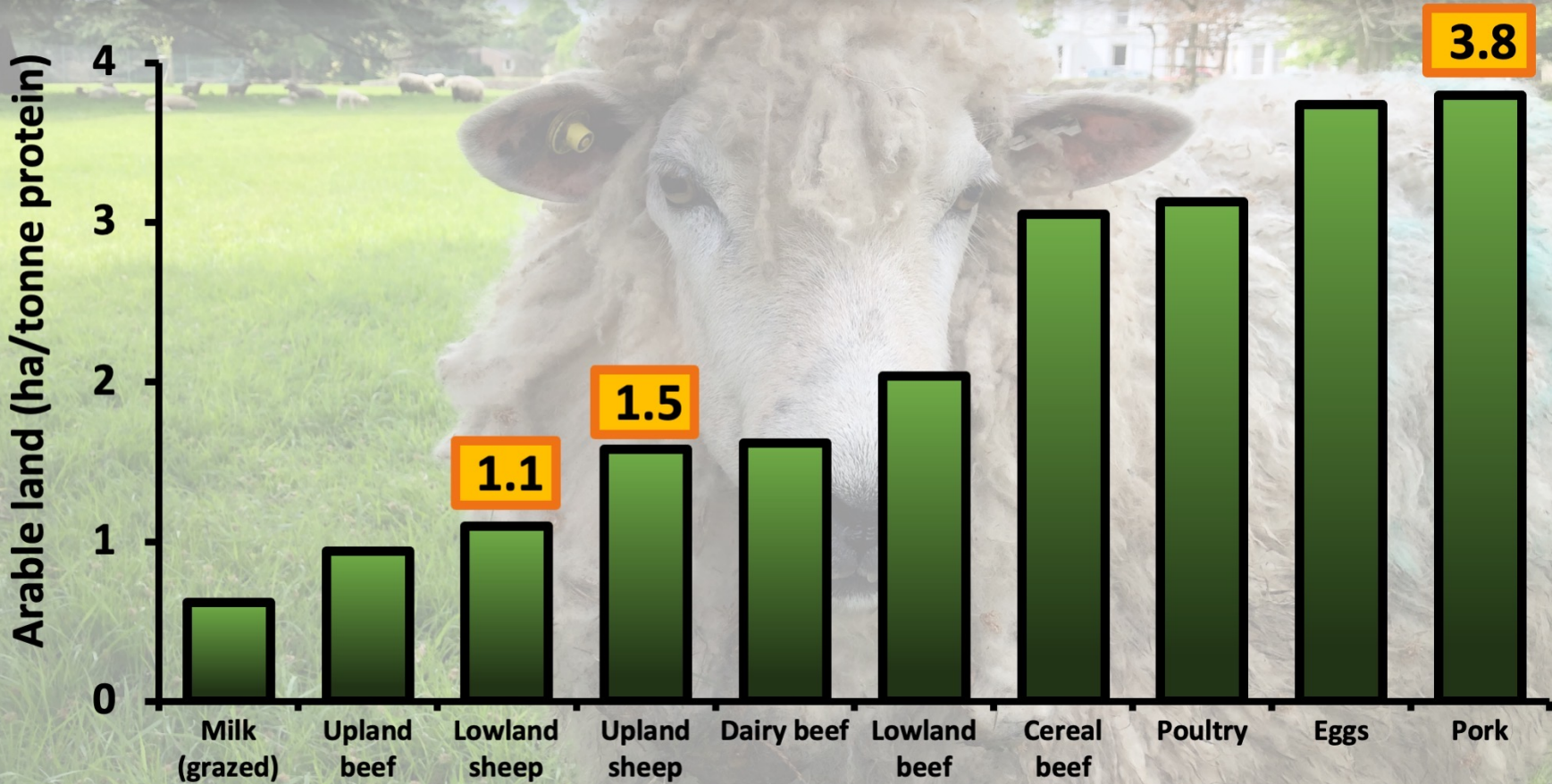
# Grazing ruminant systems use considerable quantities of land







# Grazing ruminants use much less arable land than pigs and poultry



Source: Created by and photo from Jude L. Capper, 2024. Data from Wilkinson and Lee (2018) <https://doi.org/10.1017/S175173111700218X>



# Grazing land provides much more than food

- Landscape maintenance
- Carbon sequestration
- Wildlife biodiversity
- Water filtration
- Silviculture
- Recreation
- Tourism

Source: Created by and photo from Jude L. Capper, 2024.





# Efficiency and ecosystem services shouldn't be an "either/or" choice



Source: Created by and photo from Jude L. Capper, 2024.



## Insects thrive in well-managed swards



Source: Created by and photo from Jude L. Capper, 2024.





# Removing livestock disadvantages ground-nesting birds



Source: Created by Jude L. Capper, 2024. Photo from: Odd Falch <https://www.pexels.com/photo/brown-bird-on-brown-grass-12084162/>





# Dung beetles have myriad ecosystem benefits

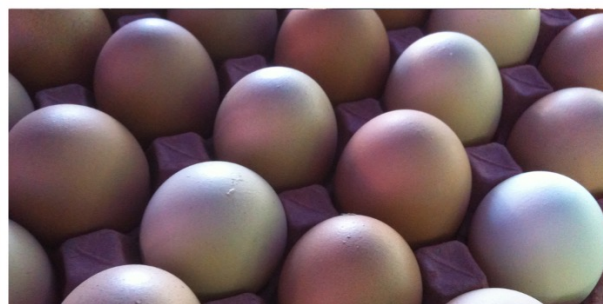


Source: Created by Jude L. Capper, 2024.





**All food ultimately comes from the soil**



Source: Created by and photos from Jude L. Capper, 2024.



**In a plastic world, we must place more value on natural fibres**



Source: Created by and photo from Jude L. Capper, 2024.





# Rural communities depend on livestock



Source: Created by and photo from Jude L. Capper, 2024.





**Learn from the innovators, the risk-takers, the experienced**



Source: Created by and photo from Jude L. Capper, 2024.





# Thank you!

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Source: Created by and photo from Jude L. Capper, 2024.