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Going green by choosing milk, meat and eggs

Dr. Jude L. Capper

6th August 2021

Source: Dr. Jude L. Capper, 2021

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COM

When I was 15, I was a vegan

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Source: Created by Dr. Jude L. Capper, 2021.

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What do I care about?



Instagram



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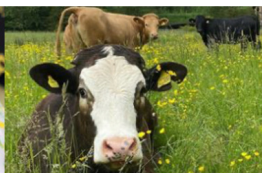
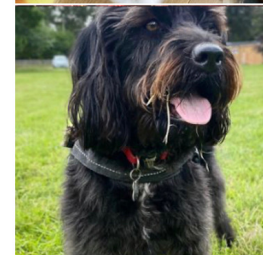
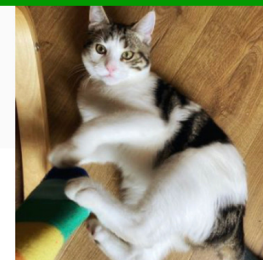
1,677
Posts

1,137
Followers

916
Following

Dr Jude Capper 🐄 🐑 she/her

Mum * Breast cancer survivor (2x) * Runner * Rugby *
Livestock Sustainability Consultant * Professor of
Sustainable Beef and Sheep at HAU *



Source: Created by Dr. Jude L. Capper, 2021.

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What do I care about?



Source: Created by Dr. Jude L. Capper, 2020.

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S

The UK government has pledged to reach net zero

Climate change: Top 10 tips to reduce carbon footprint revealed

By Roger Harrabin
BBC environment analyst

20 May 2020 | Science & Environment

Climate change can still be tackled – but only if people are willing to embrace major shifts in the way we live, a report says.

The authors have put together a list of the best ways for people to reduce their carbon footprints.

The response to the report suggests that the public is willing to consider it necessary to make changes.

And the report says that the changes must be radical.

Protecting the environment is all that counts.

The report says that the changes must be radical.

The report says that the changes must be radical.

THE SCOTTISH Farmer

Supporting farmers in Scotland since 1893

DIVERSIFICATION
10th February

Miscanthus is key to farmer's net zero ambitions

By Gordon Davidson

THE BIG ISSUE

CLIMATE CRISIS Environment

Net-zero emissions: What is it and how will the UK achieve it

Most of us know the UK wants to reach net zero emissions, but the details are murky. Here we set out the facts of the most important target in the fight to stop the climate crisis



News story

UK becomes first major economy to pass net zero emissions law

New target will require the UK to bring all greenhouse gas emissions to net zero by 2050.

Published 27 June 2019

From: [Department for Business, Energy & Industrial Strategy](#) and [The Rt Hon Chris Skidmore MP](#)



Chris Skidmore signs legislation to commit the UK to a legally binding target of net zero emissions 2050

UK's net zero carbon targets need immediate action, says National Grid



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Source: Created by Dr. Jude L. Capper, 2021; Screenshots from various publications.

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All foods have an environmental impact



Source: Created by Dr. Jude L. Capper, 2013

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B

Global averages are meaningless

The carbon footprints of the foods we eat vary considerably – global average figures are inappropriate when food production is regional



Source: Created by Dr. Jude L. Capper, 2020, infographic from: https://www.instagram.com/simple_happy_kitchen/

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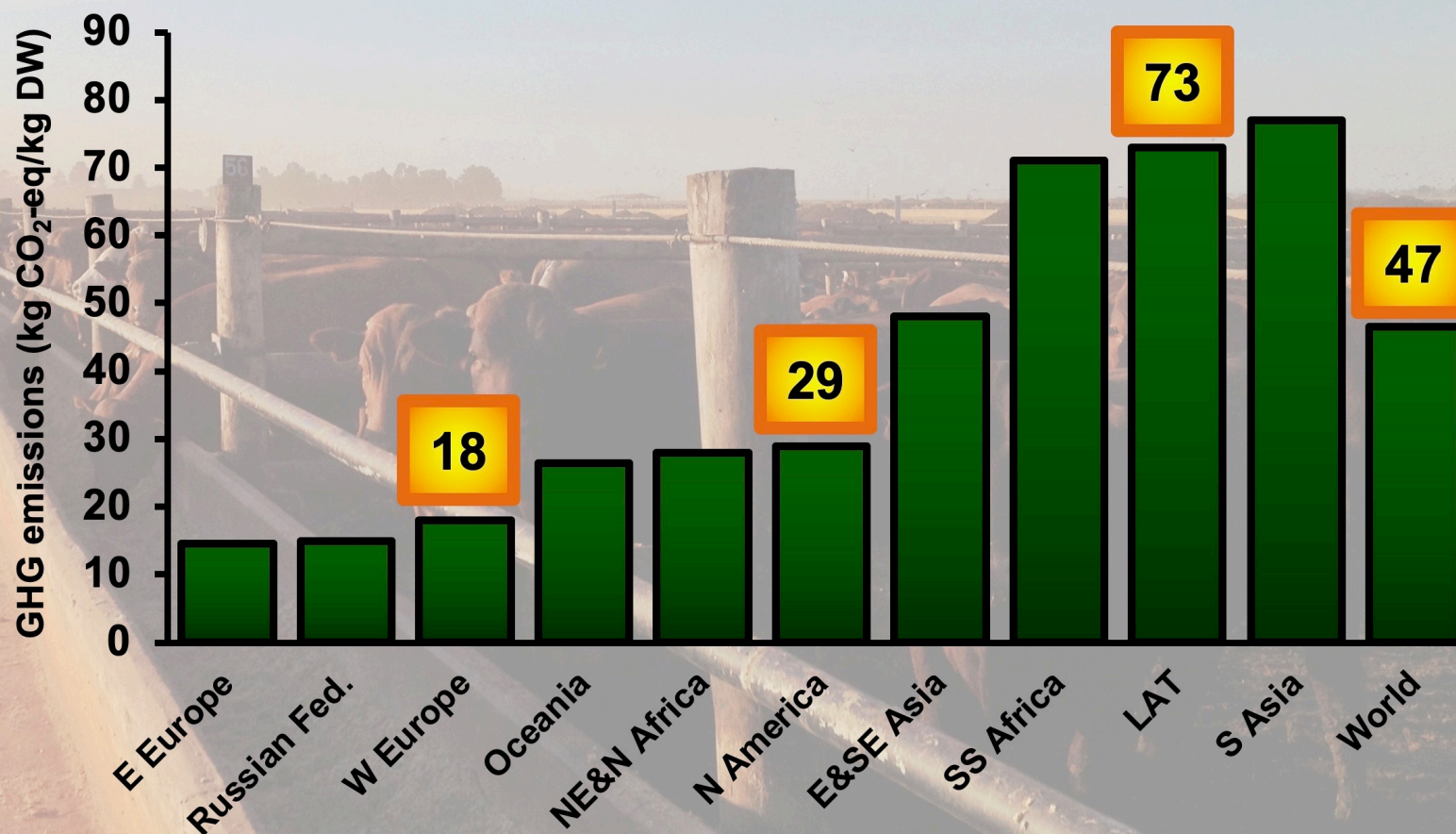
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The carbon footprint of beef production varies across the globe



Source: Created by Dr. Jude L. Capper, 2020; data from Gerber et al. (2013) Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities. FAO, Rome, Italy.

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B

Livestock production is not the only contributor to the UK's carbon footprint



UK meat and dairy production accounts for ~6.9% of total UK GHG emissions (Dept. of Energy and Climate Change 2019).

Source: Created by Dr. Jude L. Capper, 2020; Data calculated from national emissions inventory including CH₄ and N₂O, plus 30% of cropping-associated emissions sourced from Department of Energy and Climate Change (2019) "Final UK greenhouse gas emissions national statistics: 1990-2017" <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-2017>

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Livestock production is not the only contributor to the UK's carbon footprint

If everybody in the UK went meat and dairy-free every Monday, the national carbon footprint would decrease by less than 1.0%



Source: Created by Dr. Jude L. Capper, 2020; Data calculated from national emissions inventory including CH₄ and N₂O, plus 30% of cropping-associated emissions sourced from Department of Energy and Climate Change (2019) "Final UK greenhouse gas emissions national statistics: 1990-2017" <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-2017> Photo from: <https://images.britcdn.com/wp-content/uploads/2015/11/3/Shepherds-Pie-finished-4.jpg>

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Do 582,538 Veganuary participants amount to more than a hill of beans?

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NEW YEAR'S
REVOLUTION**



- Slightly smaller than the population of Sheffield
- If all participants were UK-based they would comprise <1% of the UK population
- Average of 2,787 per participating country
- 62% of participants already vegan, vegetarian or pescatarian

Source: Created by Dr. Jude L. Capper, 2021. Information from: <https://veganuary.com/>

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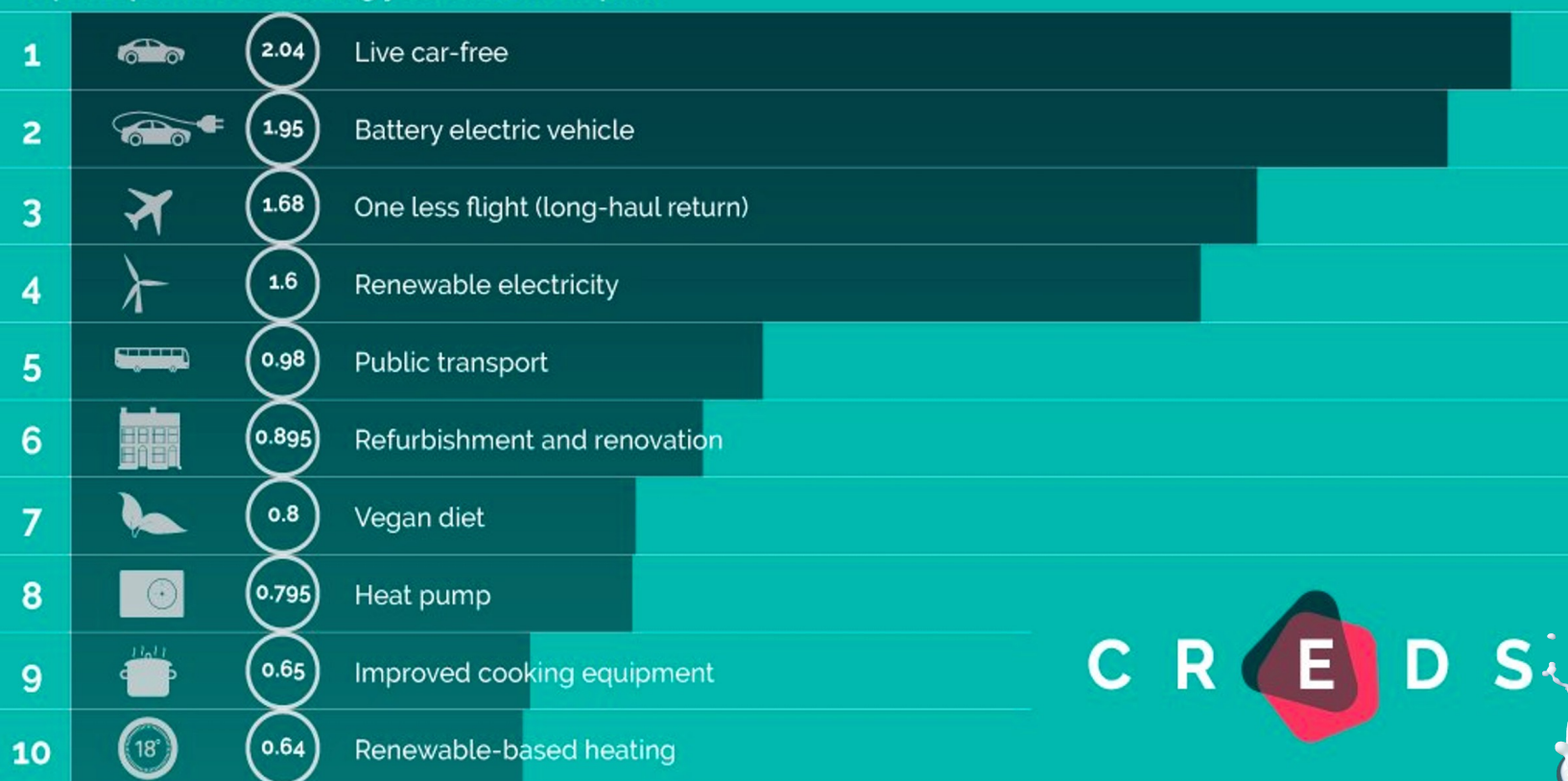
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CV

New CREDS report puts transport, energy and food choices into context

Top 10 options for reducing your carbon footprint



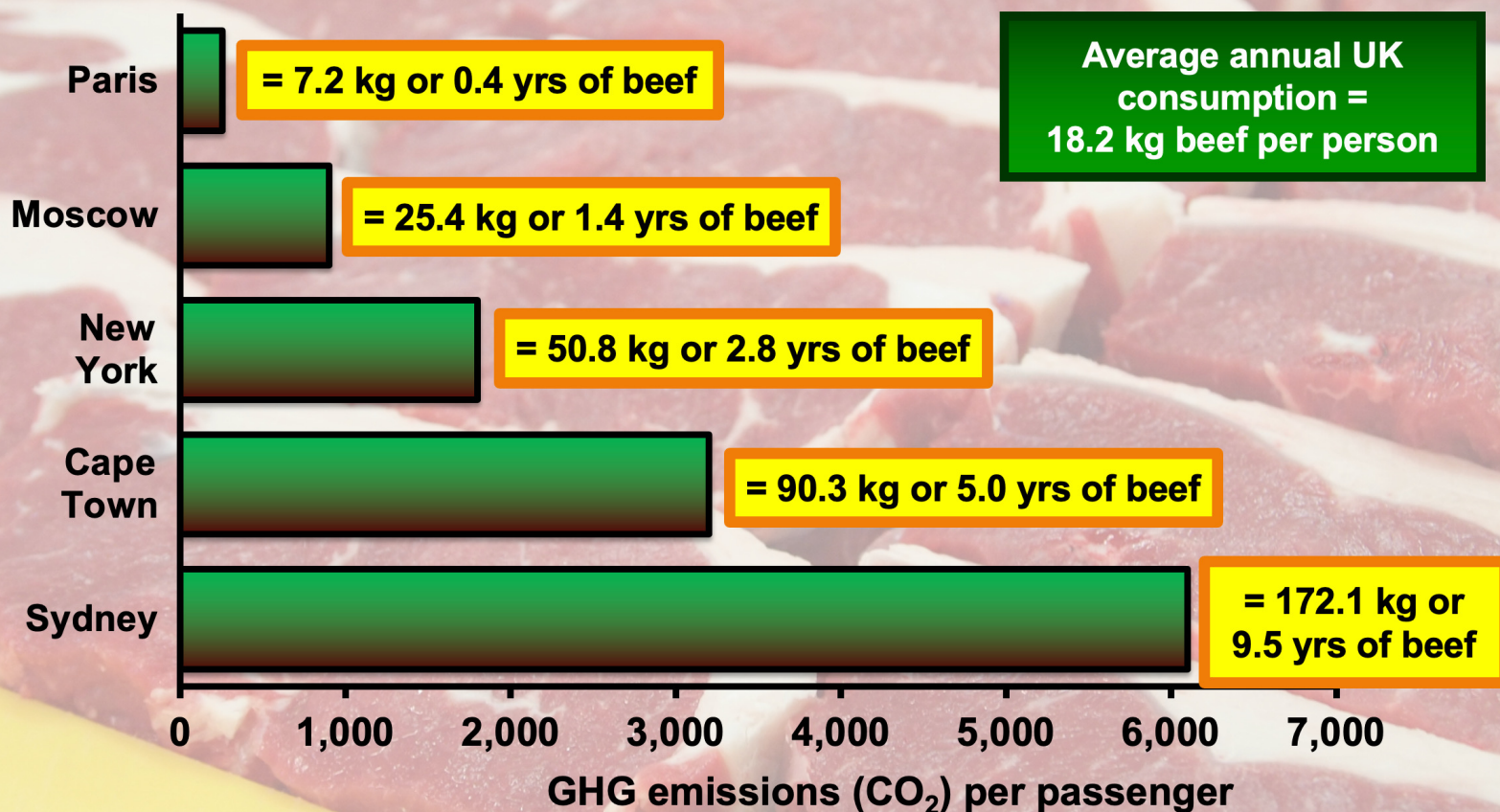
Source: Created by Dr. Jude L. Capper, 2020. . Infographic adapted from Centre for Research into Energy Demand Solutions (2020). Available at: https://twitter.com/CREDS_UK/status/1262984570175176704?s=20

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CV

International flights emit considerable quantities of carbon compared to beef production



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Source: Created by Dr. Jude L. Capper, 2021. Calculations based on GHG emissions flight data from: https://co2.myclimate.org/en/flight_calculators/new, and on a carbon footprint per kg of boneless beef of 35.5 kg CO₂-eq (under GWP100) from AHDB: http://beefandlamb.ahdb.org.uk/wp-content/uploads/2013/05/p_cp_down_to_earth300112.pdf

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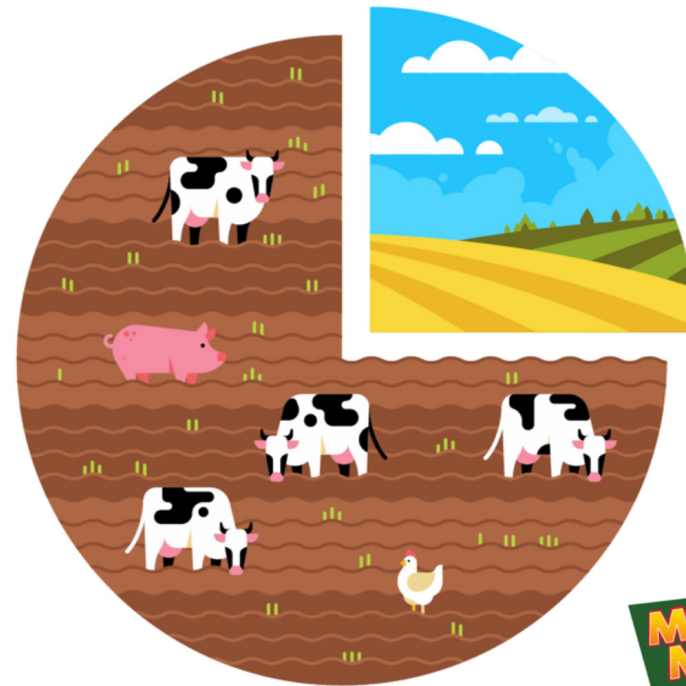
COM

We should always look beyond the headlines

We are pre-programmed to believe negative stories.

The saying “bad news sells” is absolutely true.

LIVESTOCK PRODUCTION USES
75% OF THE EARTH'S
AGRICULTURAL LAND.



MEATLESS
MONDAY

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Source: Created by Dr. Jude L. Capper, 2021. Infographic from: <https://www.pinterest.co.uk/pin/254383078939543245/>

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Can we grow human food crops everywhere?

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Source: Created by Dr. Jude L. Capper, 2021

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65% of UK land is not suitable for growing arable crops



Source: Created by Dr. Jude L. Capper, 2020. 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

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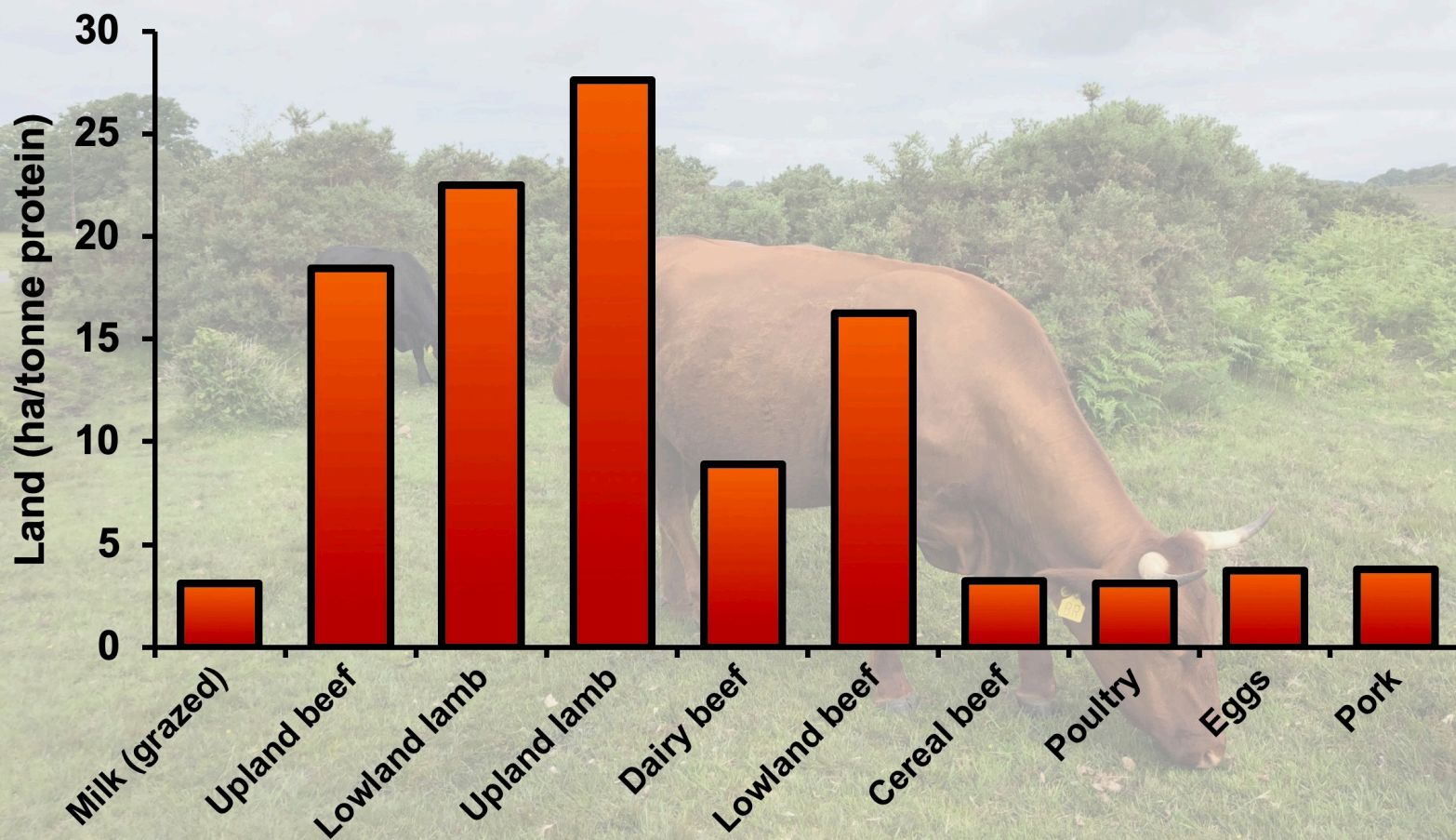
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Livestock systems vary widely in land use



Source: Created by Dr. Jude L. Capper, 2020; data from Wilkinson and Lee (2018) Review: Use of human-edible animal feeds by ruminant livestock. *Animal*.

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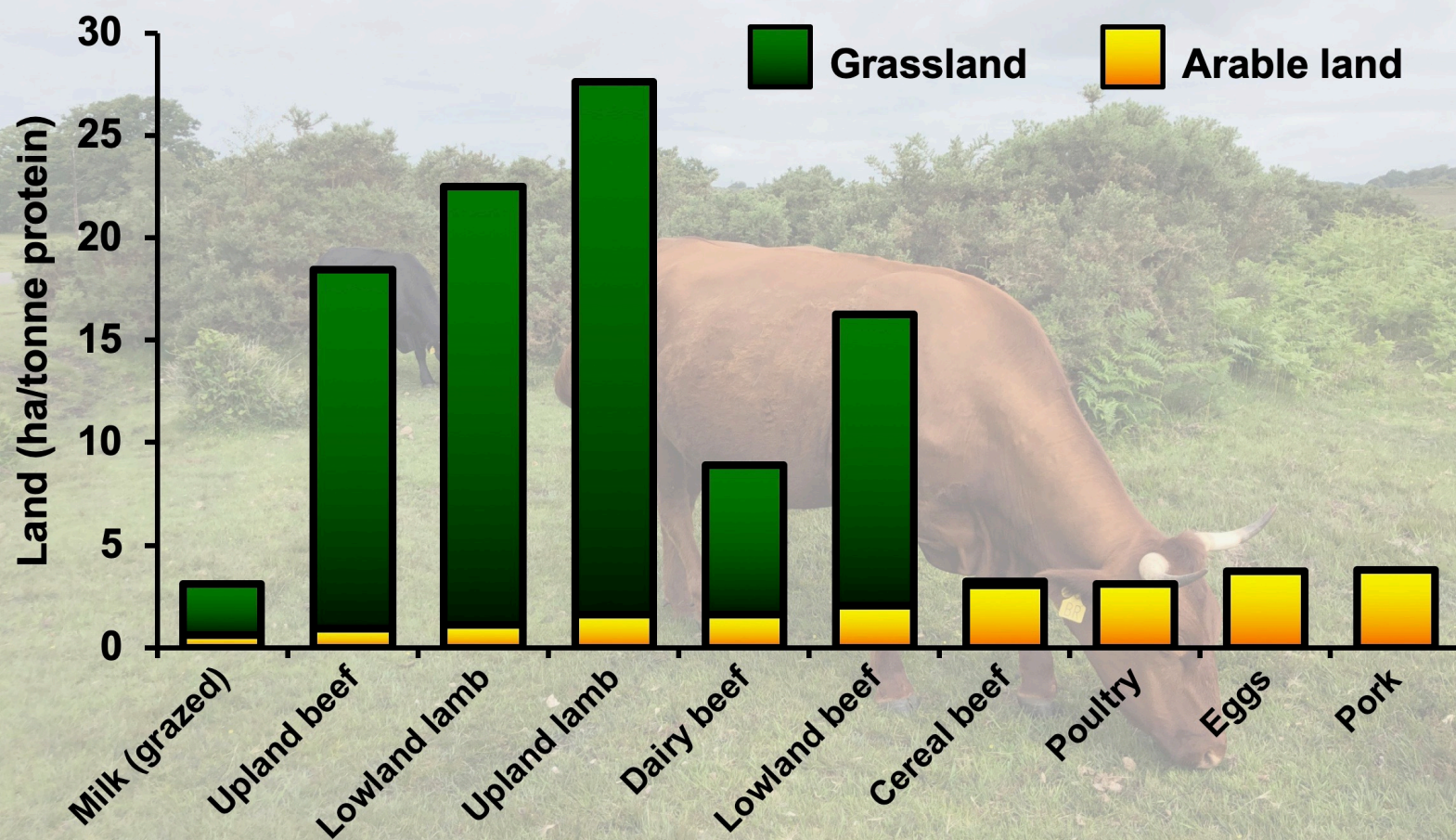
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Livestock systems vary widely in arable and grassland use



Source: Created by Dr. Jude L. Capper, 2020; data from Wilkinson and Lee (2018) Review: Use of human-edible animal feeds by ruminant livestock. *Animal*.

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Grazed land provides much more than food

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

Source: Created by and photo by Dr. Jude L. Capper, 2020

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What do these industries have in common?
They all provide by-products fed to animals



Source: Created by Dr. Jude L. Capper, 2013

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Plant-based foods often provide feeds for livestock production



OatlyUK

@OatlyUK

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A message from The Oatly Department of Mind Control: If acting collectively to promote the concept of eating plants instead of giving plants to animals and then eating them is cult-like, then welcome to our cult.



Source: Created by Dr. Jude L. Capper, 2021. Photo from: <http://twitter.com>

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Plant-based foods often provide feeds for livestock production



john hoeks @joekske · Feb 1
could you tell me what kind of farm that is?



1



3



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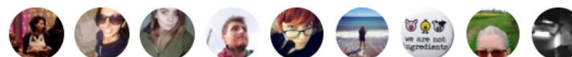
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Replying to @joekske @OatlyUK @veganimated

Hi again John! The residue from the oats goes to a pig farm which is located nearby our facilities (in Landskrona, Sweden). All the best, Oatly

1:27 PM - 2 Feb 2018

3 Retweets 6 Likes



Source: Created by Dr. Jude L. Capper, 2021. Photo from: <http://twitter.com>

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Can we grow human food crops everywhere?

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Source: Created by Dr. Jude L. Capper, 2021

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Livestock are a vital resource in developing regions

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Source: Created by Dr. Jude L. Capper, 2021



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Livestock are a vital resource in developing regions

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"I started secondary school without a petticoat; that cow bought me my first petticoat. I cannot forget that."

"For me, Send a Cow is everything"

Source: Created by Dr. Jude L. Capper, 2021. Photo from Send a Cow (2018) <https://www.sendacow.org/blog/for-me-send-a-cow-is-everything>

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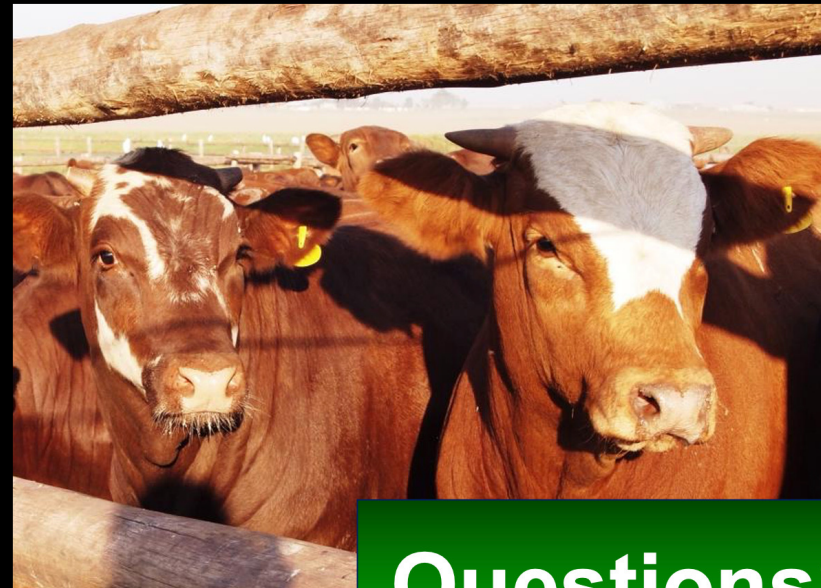


Thank you!

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<http://bovidiva.com/presentationlinks>

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Questions?



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Source: Created by Dr. Jude L. Capper, 2021. Cartoon from: <http://RubesCartoons.com>