

CIEL Open Innovation Group

Feed & Nutrition - Ruminant

Tuesday 7th June 2022 - Meeting Notes

Attendees Andy Alder (Chair), David Wilde, Phil Garnsworthy, Richard Wynn, James McCulloch, Julie Wright, Katerina Theodoridou, Aurelie Aubry, Sokratis Stergiadis, Mark Young, Harry Kamilaris, Annie Williams, Fiona Short, Jane Salter

Apologies Francis Lively (replaced by Aurelie Aubry), Sarah Banks, Mark Scott

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- Defined need is to partition carbon & nitrogen losses (i.e. inputs not captured as product) so that the form it was lost to animal in could be considered in terms of impacts on emissions or nutrient outflow. Previous systems focused on what was captured for use by the animal including products.
 - We should focus on **animal model**, not farm model
 - Effectively we need to bridge gap between rationing software and carbon calculator tools. Noted that rationing software fulfils a commercial need whereas carbon calculators address an externality
 - We need to determine which are the best equations to use for predicting such losses – carbon & nitrogen e.g. during ensiling N content can half. Where do the losses go? How can we quantify this in different systems & look at ways to mitigate? Similar losses exist for energy.
 - Simulations will be needed
 - Discussion covered how to improve models and evidence required, to add modules on to current tools

ACTION: Draft remit for literature review focused on developing model of nutrient partitioning – Led by David with Richard, Aurelie and Sokratis

- Forages are big gap in data needed for nutrient modelling
 - Need to have way of coping with forage variability
 - Need UK specific figures, not EU averages. RAR figures based on European averages are not good enough for predicting what is happening on UK farms.
 - Need project in this space to generate UK relevant figures.
 - Need to define methods for assessment of forages

ACTION: Need to draft up specification for project in this space. This was identified in writing up these notes so currently there is no industry expert identified to lead development of this specification. At present this has not been allocated to anybody, please could you let me know asap if you are interested in being in a sub-group for this, if there are no volunteers by 6th July we will delegate.

Continued ...

AIC feedback

- AIC pulled out of GLFI database c.120 ingredients routinely used in UK and focused on GHG emissions (land use change should be assumed without robust data to suggest otherwise). This data is available and can be incorporated into ration formulation tools.
- Use of this data will incur a charge for independent consultants.
- Fertiliser inputs have been taken as the global average, but UK fertilizer inputs are lower!
- Gaps in the data have been identified for forage and liquid feeds. AIC are looking into these.
- Jane Salter confirmed that ADAS are reviewing Carbon Calculator tools for Defra. All are IPCC compliant and can compare progress on a farm over time.
- Jane raised the future development of the feed advisor register and outlined developments regarding nitrogen use efficiency scheme.

ACTION: Jane to send documents related to several points above (this has been done)

- CIEL are following developments in funding opportunities and will highlight any relevant funding as a when it is announced.