

In this CVERA e-zine, we provide a brief overview of some of the recent work conducted by CVERA staff in collaboration with a wide range of national and international institutions. More in-depth information can be found at http://www.ucd.ie/cvera/, noting the role of CVERA to provide high quality independent scientific research and advice to support national evidence-based policy-making in animal health & welfare and public health and related matters.

Retirement of Professor Simon More

Simon More, Professor of Veterinary Epidemiology and Director of the UCD CVERA, retired from UCD in 2024 after more than 20 years in the School of Veterinary Medicine. During his time in CVERA, Simon authored or coauthored almost 300 scientific papers in international peer-reviewed journals on a vast range of topics including bovine tuberculosis Covid-19, fish health, domestic pet populations, Bovine Viral Diarrhoea Virus, and equine welfare. Throughout his time in CVERA, Simon always endeavoured to conduct independent, peer-reviewed research with the aim of assisting policy colleagues in making informed decisions in the fields of animal health, animal welfare and One Health. As a Professor in the School, Simon made a substantial contribution to both undergraduate and postgraduate teaching programmes and supervised many Masters and PhD students. He was appointed Associate Dean for Research, Innovation and Impact in 2018. Simon was also a member of the

School's Senior Management Team and a member of the Athena SWAN Action Team. Simon worked closely with colleagues in the Department of Agriculture, Food and the Marine (DAFM) and provided scientific expertise to DAFM on a wide range of animal health issues. Simon was heavily involved in the work of the European Food Safety Authority (EFSA). Colleagues in CVERA thank Simon for his huge contribution and, more importantly, his friendship over the last 20 years. An extended version of this can be found in the UCD School of Veterinary Medicine Newsletter (Autumn 2024 edition).

Professor Conor McAloon has been appointed Director of the Centre for Veterinary Epidemiology and Risk Analysis

Prof. Conor McAloon has been appointed Director of CVERA following the retirement of Prof. Simon More. Conor is originally from a dairy farm in Co. Tyrone and qualified as a veterinary surgeon from

UCD in 2011. Conor worked in mixed practice in Strabane, Co. Tyrone before returning to UCD in 2013. He is recognised by the European College of Veterinary Specialisation as a Specialist in Bovine Health Management, and by the Royal College of Veterinary Surgeons as a Specialist in Cattle Health and Production. In 2017, he completed a PhD in the epidemiology and control of Johne's Disease in Irish dairy herds. Conor worked as a clinician and lecturer in Bovine Health Management in the UCD School of Veterinary Medicine where he divided his time between clinical work, teaching and research. Conor has an extensive research background in all aspects of cattle health, production and welfare, and is actively involved in research in dairy calf pneumonia, Johne's disease, surveillance, epidemiology, welfare, antimicrobial use and biosecurity. For more information, please visit here.

Eradication of bovine tuberculosis in Ireland: is it a case of now or never?

There has been a sharp disimprovement in the bovine tuberculosis (bTB) situation in Ireland in recent years. This commentary by Prof. Simon More argues for critical programme change in three overarching themes relevant to the Irish bTB eradication programme, if eradication is to be successful: (1) Limiting infection in cattle; (2) Limiting infection within and from wildlife; and (3) Programme leadership, management, governance and cost-sharing. In these three themes, most of the constraints are non-technical. If difficult decisions are not taken and the status quo is allowed to continue, there is a risk that infection may establish in further wildlife species, which may make

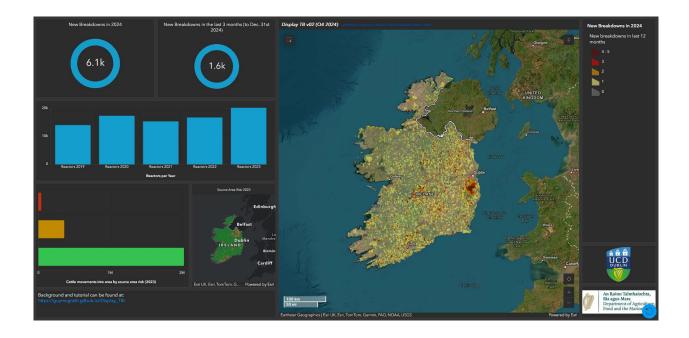
eradication unattainable. Current decisions (including inaction) will impact future generations, including the general public (through the Exchequer) and future farming families. The full commentary can be accessed for free at the *Irish Veterinary Journal* 77, 22.

Farm fragmentation in Ireland

Farm fragmentation refers to spatial disaggregation of farms into smaller, often highly separated parcels of land. This can create a number of problems; administrative, economic, environmental and epidemiological. Ireland has a high proportion of fragmented farms, although this issue is not unique to Ireland. From an epidemiological perspective, where a farm is heavily fragmented, there is uncertainty in assigning a location to where livestock have spent time on that farm. We explore techniques to quantify the extent and regional variation in fragmentation and the between fragment distances of fragmented farms in Ireland with the aim of reducing this uncertainty. The findings, which have been made available as an online resource, allow for more precision in spatial analyses of bovine populations and help enhance surveillance and field epidemiology. This paper, which was led by Guy McGrath, is freely accessible at the Veterinaria Italiana 60, 4.

CVERA is now on BlueSky

Follow us at <u>@ucd-cvera.bsky.social</u> where we will keep you up to date on recent publications that CVERA members lead or contribute to.



DisplayTB – viewing bovine tuberculosis breakdowns at a local level

The DisplayTB mapping dashboard was created as part of a research program into Bovine Tuberculosis (bTB) being conducted by CVERA for the Department of Agriculture, Food and the Marine (DAFM). The interface allows stakeholders to view current and recent bTB status and bTB testing history of herds in their local area. This is an ongoing research project, and the content is likely to change over time. View the DisplayTB mapper here.

Computing metrics to inform selection of candidate areas for a regionalized approach to bovine tuberculosis eradication in Ireland

Tratalos et al describe the computation of metrics to inform the selection of areas for a regionalised approach to bovine tuberculosis eradication in Ireland. Their aim was not to recommend suitable regions but to elucidate the criteria used in metric selection and comment on the diversity of metric values amongst regions. The 26 counties of Ireland

were compared using 20 metrics, grouped into five categories: region size and cattle population, herd fragmentation, cattle movement, bovine TB testing, badger population and control. Fragmentation metrics, measuring the proportion of herds with land in at least two counties, varied considerably by county, from 1% to 24 %. Between 25 % and 92 % of moves into herds came from a different county, illustrating the likely disruption in trade that a regionalized approach could entail. Cattle movement networks were combined with a risk model to calculate the proportion of moves which would be deemed risky under a risk-based trading regime and these results were compared to a more traditional approach based on the herd type and test history of each herd, with many fewer moves potentially restricted using the latter approach. The authors show how correlation between region size and some of the metrics complicates their interpretation. This paper, which was led by Jamie Tratalos, is freely accessible at the *Veterinaria* Italiana 60, 4.

In addition to the items mentioned above, the following, recently published, papers include coauthors from CVERA.

Brock, J., Guelbenzu-Gonzalo, M., Lange, M., Tratalos, J.A., Barrett, D., Lane, L., More, S.J., Graham, D.A., Thulke, H.H., 2024, Evaluating the effectiveness & costs of strategies post-eradication to monitor for freedom from BVDV infection in Ireland. *Agricultural Systems* 221, 104127.

Chang, Y., Widgren, S., de Jong, M.C.M., Tratalos, J.A., More, S.J., Hartemink, N., 2025. Evaluating the effectiveness of badger vaccination combined with cattle test-and-removal in managing bovine tuberculosis: Insights from a two-host and multiroute transmission model. *Preventive Veterinary Medicine* 235, 106386.

Martin, H., Manzanilla, E.G., More, S.J., Hyde, R., McAloon, C., 2025. Quantification of antimicrobial use on Irish dairy farms: A comparison of three recording methods. *Journal of Dairy Science* 108, 1790-1806.

McAloon, C.I., Farrell, D., Smith, J., Gordon, S.V., Sheehan, M., Kennedy, A., Geraghty, T., Mason, C., Leggett, B., Leonard, F.C., Sweeney, T.,

http://www.ucd.ie/cvera +353 (0)1 716 6144 @ucd-cvera.bsky.social @UCD_CVERA McGrath, G., O'Shaughnessy, J., O'Rourke, J., Ridley, A., Deeney, A., More, S.J., 2025. Characterisation and comparison of *Mycoplasma bovis* strain types from Irish and Scottish bovine isolates in a global context. *Veterinary Microbiology* 300, 110339.

Murphy, K.J., Byrne, A.W., Marples, N., O'Hagan, M.J.H., Kelly, D.J., Quinn, D., Breslin, P., Morera-Pujol, V., Khouri, R.M., Barrett, D., McGrath, G., Ciuti, S., 2025. Wildlife response to land-use change forces encounters between zoonotic disease hosts and farms in agricultural landscapes.

**Agriculture, Ecosystems & Environment 386, 109561.

O Donovan, S.M., McAloon, C.G., O'Grady, L., Geraghty, T., Burrell, A., McCarthy, M.C., Donlon, J., Tratalos, J.A., Mee, J.F., 2024. Use of conjoint analysis to weight biosecurity practices on pasture-based dairy farms to develop a novel audit tool-BioscoreDairy. *Frontiers in Veterinary Science* 11, 1462783.