DEEP DIVE INTO WATER

D/ Enhancing profit while protecting the environment. How?

Chaired by Paul Bird, Farm Business Specialist at DairyNZ





Dr Laurence Shalloo

Researcher dairy farm economics and sustainability at Teagasc

Laurence Shalloo is a Senior Principle Research Officer in the Livestock Systems Research Department of the Animal and Grassland Research and Innovation Programme, and is based at Moorepark. He is a principle Investigator and deputy director of the SFI funded VistaMilk Centre. Currently supervising three Ph.D. students registered at UCC, and WUR based at Moorepark. Laurence is responsible for the generation of the economic values for the Irish Dairy cow selection index (EBI). Laurence was instrumental in the development of the Pasture Profit Index as well as the development of PastureBaseIreland

Identifying the optimum systems that are resilient, highly profitable and sustainable



Mark Neal Farm Systems Specialist at DairyNZ

Mark Neal is a Dairy Systems Specialist with DairyNZ. He trained as an Agricultural Economist at the University of Sydney. While in research and development roles, he has worked with economic modelling and optimisation of farm systems, farm systems design, and quantifying the impact of environmental regulation on farm profit. More recently he has worked with strategic initiatives to improve farm profit and reduced footprint farming systems, and was a lead author for a report analysing international competitiveness. He has also worked with the University of Sydney and University of Melbourne on research projects, and been involved with

numerous research bids and multi-organisation collaborations. His family has two dairy farms in New South Wales, Australia, with 1100 milking cows in total, where he has previously managed operations. Mark has also managed operations of grazing-based dairy farms in Chile and the United States.

Enhancing profit while protecting the environment. How?

Previous work has pointed towards high pasture harvest, with low reliance on supplementary feed and effective cost control being key attributes of financially-robust dairy businesses. With increasing emphasis on water quality and greenhouse gases, have these messages changed? In short, no. Examination of farm level variation (with data from DairyBase) suggests that there are opportunities to maintain profit with lower N surplus and lower methane output. Looking forward, improved practises, and implementing science when it is "farm-ready", will continue to be important.