VEERU, Department of Agriculture

PAN Livestock Services Ltd

Investigating Europe's largest milk recording database: Combining research and practical application

The milk recording database - NMR

National Milk Records (NMR) is Europe's largest milk recording organisation, collecting production data and milk samples from over 5,000 UK dairy herds every month. In excess of 6.5 million milk samples are tested each year for factors ranging from constituents to somatic cell count to disease status.

Practical application – PAN Livestock Services

PAN Livestock Services Ltd (PAN) has worked closely with NMR since 1998 on the development of practical livestock information systems. Developments include Herd Companion (on-line analysis of milk recording data), InterHerd and InterHerd+ programs which are extensively used by farmers and their technical advisers across the UK.

Research expertise - VEERU

The Veterinary Epidemiology and Economics Research Unit (VEERU), established in 1977 in the Department of Agriculture at The University of Reading, has worked closely with PAN since 1987. VEERU has extensive experience of analysing livestock production and disease data relating to animal health challenges faced by public and private livestock and veterinary services. VEERU is recognised by the Food and Agriculture Organisation of the UN (FAO) as a Reference Centre for Veterinary Epidemiology and Economics.

Combined expertise

The practical commercial experience of PAN and the close working relationship with NMR ensures a thorough knowledge of the NMR milk recording database. Combining this with the analytical and research expertise at VEERU offers an unrivalled ability to research and investigate the contents of the NMR database for the benefit of the UK dairy industry.

Contact information

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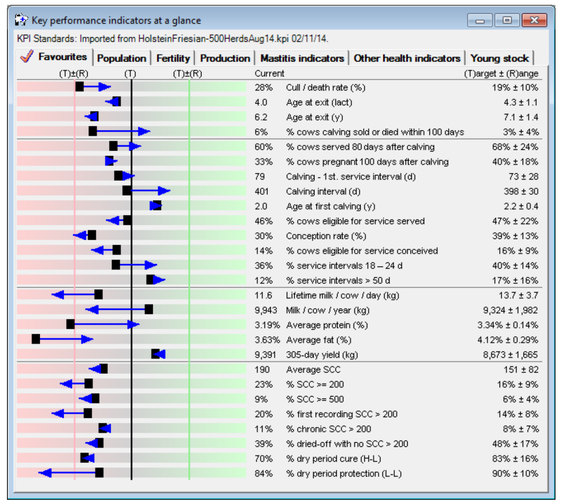
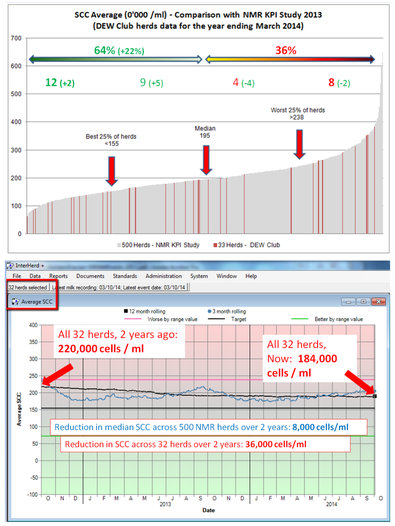
1. Key Performance Indicators (KPIs) of UK Dairy herds

Each year since 2010 VEERU has analysed the performance of 500 milk recording herds. The herds are selected using random numbers to ensure they are a representative cross-section of all herds . These analyses have a growing number of applications:

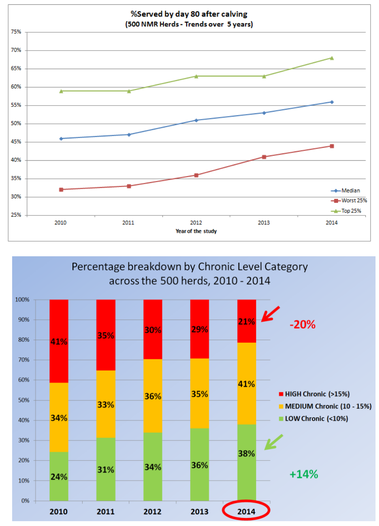
1(a): Target and range values for over 60 Key Performance Indicators for use in InterHerd+



1(b): Benchmarking performance and progress of herds/groups against the industry

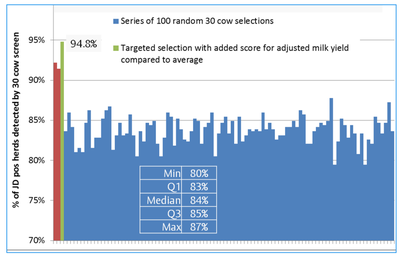


1(c): National trends in herd performance

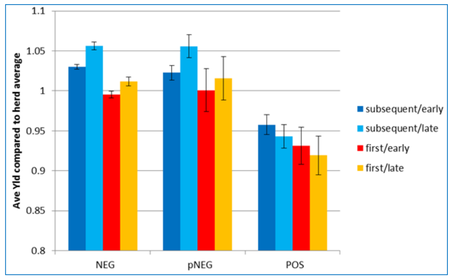


2. Analysis of the NMR database for specific research questions

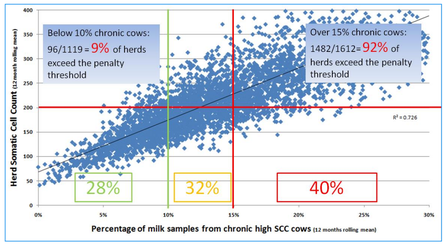
2(a): Efficacy of 30 cow targeted screen for detecting Johne's +ve cows



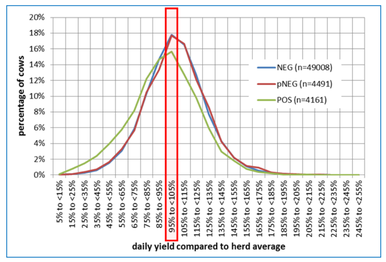
2(c): Milk yields of cows from three Johne's Disease status groups compared to adjusted herd averages



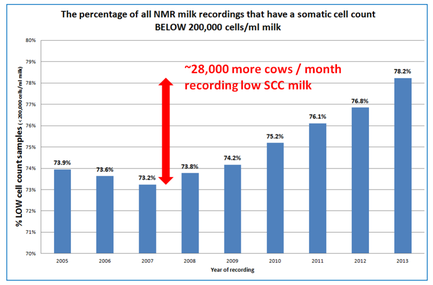
2(e): Correlation between herd SCC and the % milk samples from chronic high SCC cows



2(b): Distribution of yield compared to herd average for all cows in three Johne's Disease status groups



2(d): Annual % of all NMR milk samples that are LOW SCC



2(f): Differing survival outcomes of cows with lower than expected yields at first milk recording