



EAAP 2007

58th Annual Meeting of the European Association for Animal Production
Dublin • Ireland • August 26th - 29th • 2007



FACULTY of
VETERINARY SCIENCE

International Dairy Cattle Fertility Conference

August 30th and 31st, 2007

Liverpool

Contact Dr Mel Royal for further information (mdroyal@liverpool.ac.uk)

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UNIVERSITY OF
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International Dairy Cattle Fertility Conference, Liverpool.
30th-31st August 2007.

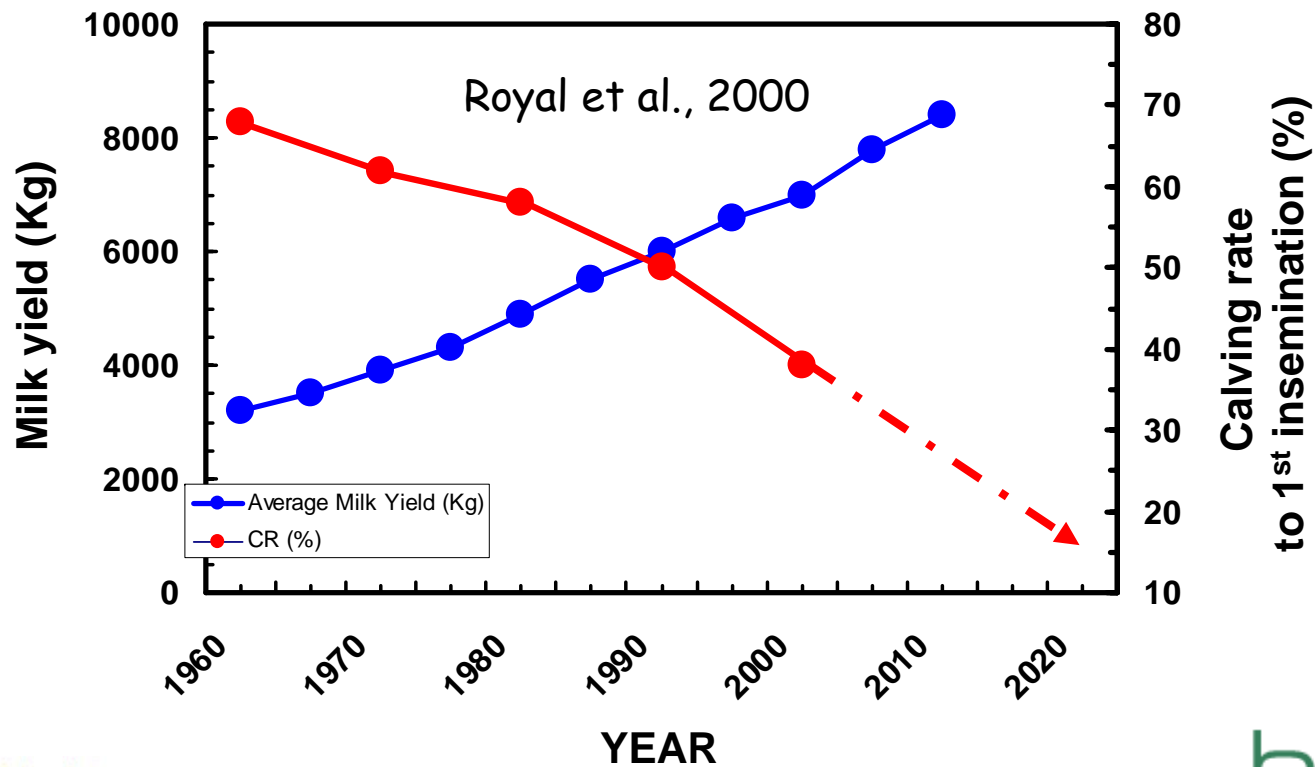
Further details contact Dr Mel Royal mdroyal@liverpool.ac.uk



When dairy farmers are asked to identify the main problems within their herds, fertility is **ALWAYS** in the top three



This Graph Illustrates the Decline in Fertility (-) Simultaneous to the Increase in Milk Yield (-) Since 1960



- . - indicates extrapolation

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So for every 100 dairy
cows inseminated for the first
time, only approx 34 are expected
to conceive and carry a calf to term



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This now well documented decline in fertility has prompted new research into diverse aspects of dairy cow reproduction. It has also prompted the development of new technology and applications in the field.



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Conference Objectives

The meeting will cover a broad range of subjects within reproduction and has three main objectives:

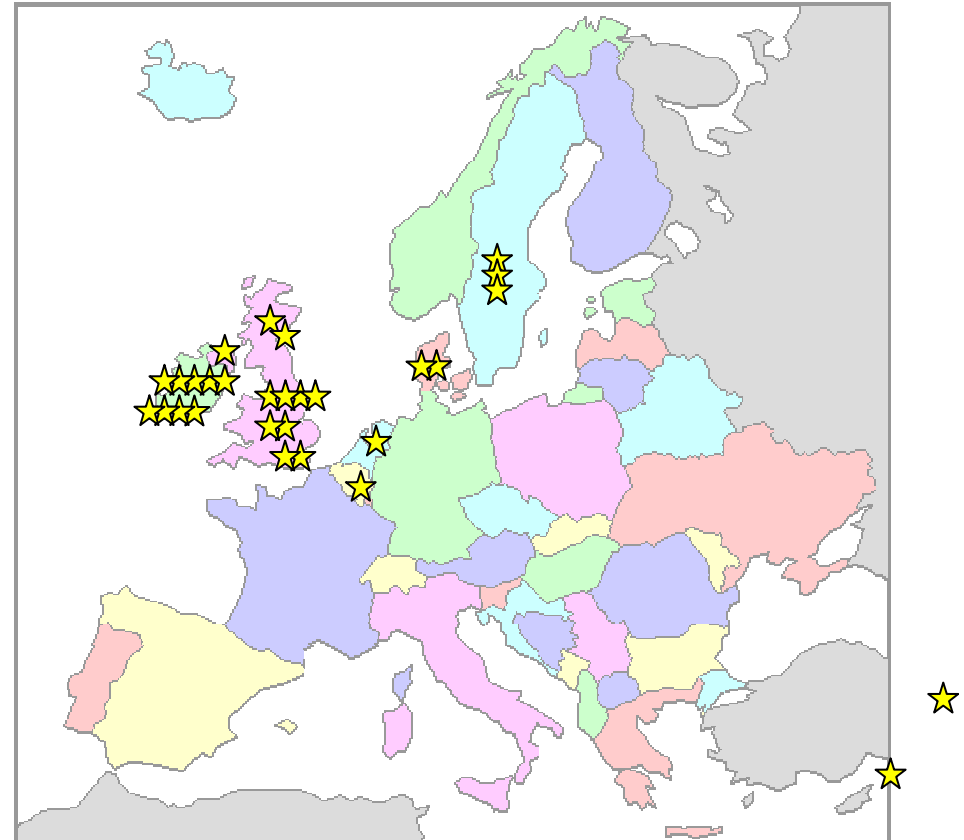
to discuss some of the on-going controversial issues in cattle breeding and reproduction, to introduce new ideas and to promote fruitful exchange of knowledge that can be applied to the dairy industry and at the farm level



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The conference has key note speakers from all over the world recognised as experts in their field



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bsas
british society of animal science




Dr Jennie Pryce

Livestock Improvement Services, New Zealand

"Fact and Fiction of Kiwi Cow Fertility: The New Zealand Approach to Breeding More Fertile Cows"

Jennie trained in Edinburgh as an animal breeder. She is currently involved with developing strategies to control inbreeding in the national population, economics of fertility and heifer survival and condition score. Her research interests are genotype by environmental interactions and broadening breeding goals.

Dr Bonne Beerde

Wageningen University, Netherlands

"Expression Profiles of Genes Regulating Dairy Cow Fertility: Recent Findings, On-Going Activities and Future Possibilities"

Bonne completed an MSc in Animal Sciences at Wageningen and a PhD at Utrecht University in dog behaviour and stress physiology. Present activities include working on EU integrated projects concerning locomotory health in dairy cows and broilers and genomics of female fertility.



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Dr Phil Garnsworthy

University of Nottingham, UK

"Integration of Physiological Mechanisms that Influence Fertility in Dairy Cows"



Phil completed his PhD at the University of Aberdeen. He is now an Associate Professor in Dairy Science. His past research interests have included body condition score and food intake. Currently Phil is interested in nutrition of dairy cows and maximising food utilisation for milk production without compromising reproduction.

Prof Claire Wathes

Royal Veterinary College, UK

"Factors Influencing Heifer Survival and Fertility on Commercial Dairy Farms"

Claire is currently Head of the Reproduction Group at RVC. Her research interests are dairy cow fertility; in particular effects of energy balance and factors affecting longevity and the effects of polyunsaturated fatty acids on prostaglandin synthesis and reproduction



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Dr Donagh Berry

Teagasc, Moorepark, Ireland



"Body Condition Score and Fertility: More Than Just a Feeling"

Donagh completed his PhD in 2003 in the "Genetics of body condition score, body weight and fertility in Irish dairy cows" at Lelystad, The Netherlands. He is currently a senior cattle geneticist. His research interests include the development of the dairy total merit index for dairy cattle, genetics of feed intake and residual feed intake, crossbreeding, genetics of robustness and product quality and inbreeding

Dr Adam Lock

University of Vermont, USA

"Can Dietary Fatty Acid Supplementation Aid Reproduction? Challenges and Opportunities"

Adam is an Associate professor in the Dept. of Animal Science. He received degrees from University of Nottingham, prior to moving to Cornell University as a research associate working with Dale Bauman. His research focuses on the regulation and manipulation of ruminant lipid metabolism. The effect of diet on milk fat synthesis and the production of dairy based functional foods with enhanced benefits for human health is of special interest.



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Dr Jo Leroy

University of Antwerp, Belgium

"Metabolic Changes in High Yielding Dairy Cows and the Consequences on Oocyte and Embryo Quality"

Jo is a post doctorate within the Faculty of Biomedical, Pharmaceutical and Veterinary Sciences. He completed a PhD entitled "The Influence of Nutrition and Metabolism on Oocyte and Embryo Quality". His current interests are also in this area.

Dr David Gardner

University of Nottingham, UK

"The Concept of Developmental Programming of Reproduction in Farm Animal Species"

David graduated with a degree in Zoology. He then completed a PhD at University of Southampton and a post doctorate at the University of Cambridge before taking his current post as a lecturer in Developmental Physiology within the School of Veterinary Medicine. He is currently working on the physiological development of the foetus *in utero* and the role of the environment in altering the development of the adult offspring



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Dr Catherine Hayhurst

University of Liverpool, UK

"Juvenile Predictors of Fertility"

Catherine is currently a post-doctorate within the division of Livestock, Health and Welfare. She completed her PhD With Dr Melissa Royal in 2007 on the use of metabolic hormones as juvenile predictors. Her current work is involved in the genetic analysis of physiological parameters associated with fertility. Catherine is one of the two invited young scientists.

Dr Nic Friggens

University of Aarhus, Denmark

"Where Did She Come From? Where Is She Going? - The Potential for On-Farm Fertility Profiles"

Nic is now a senior Scientist within Animal Health, Welfare and Nutrition. The aim of, and motivation for most of the work Nic has carried out has been to develop simplified models that attempt to clarify the underlying biological principles by which animals function. Currently this interest is directed at how the genotype and reproductive state of the animal influences its partition of nutritional resources and subsequent health.



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Mr Mike Christie BVMS DBR MRCVS

Lambert, Leonard and May, Large Animal Veterinary Surgeons, UK

"Reproductive Challenges of Today's Dairy Industry"

Mike joined the Lambert, Leonard and May in 2004. Previously he was the in-house vet at Cogent Breeding Ltd where he gained his expertise in cattle fertility and embryo transfer. He remains responsible for the bull stud at Cogent and heads the ET Unit at Lambert, Leonard and May.

Mr Stuart Revell MRCVS Genus ABS, UK

"The Other Half of the Herd: What's New in Sperm Science?"

Stuart is a Senior Veterinary Surgeon (Research) at Genus ABS. His specialist area is semen technology and he has worked within the AI industry for over 20 years. Stuart has published a number of research publications covering areas such as: sperm cryopreservation, semen assessment, heterospermic insemination and semen morphology.



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Dr Erin Williams

"Effect of E.coli Infection of the Bovine Uterus from the Whole Animal to the Cell"

Erin completed her PhD at RVC with Martin Sheldon looking at "The effect of postpartum uterine infection on ovarian function in the cow". Erin is currently a postdoctoral research associate in the pathobiology and infectious diseases unit of the school of vet med at university college Dublin. Erin is one of the two invited young scientists.

Dr Dermot Morris

Teagasc, Ireland

"Effects of Progesterone on Embryo Survival"

Dermot is a Principal Research Officer at the Animal Production Research Centre at Teagasc, Co. Galway. His research interests are factors affecting farm animal fertility in particular how uterine gene and protein expression are affected by nutrition and hormonal imbalance.



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Professor Chris Knight

University of Glasgow, UK

"Extended Lactation: Could it Work for UK Dairy Farmers?"

After studying at Nottingham and Cambridge Chris spent over 25 years in lactation research at the Hannah Research Institute, in Ayr. His research interests are in mammary gland development/function. Chris is currently a Visiting Professor in the Veterinary Medicine faculty of Glasgow University, but will shortly be taking up a position as Professor of Farm Animal's Production Physiology in Copenhagen University.

Dr Brian Wickham

Irish Cattle Breeders Federation, Ireland

"Are We Making the Most of Current Indicators? Experience From the National Recording Systems"

Brian was appointed as Chief Executive of the Irish Cattle Breeding Federation in 1998 and has overseen a major redevelopment of Ireland's cattle breeding infrastructure. His interests include information technology, genetic evaluations and breeding scheme design. Previously, he worked for Livestock Improvement in his native New Zealand and played a major role in the establishment of Interbull.



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Professor Hilary Dobson

University of Liverpool, UK

"Why is it Getting More Difficult to Successfully Artificially Inseminate Cows"?

Hilary entered Faculty of Veterinary Science as a Ph.D. student in 1969. Joined the academic staff in Department of Veterinary Clinical Science in 1976 and appointed personal chair in 1994.

Professor Jack McAllister

University of Kentucky, USA

**"Why this continued Interest in Crossbreeding?:
Prospects for Improved Dairy Reproduction and Biology"**

Jack is currently an extension professor in dairy cattle genetics, systems and economics. He completed his PhD in Ohio State University before completing post doctoral research at Dekalb Ag research Inc, Illinois; Animal Research Centre, Canada and Dept Animal Sciences, University of Kentucky. Currently Jack develops extension programs concerning Dairy Decisions and Management, Farm production and business analysis and herd genetic improvement



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Mr Chris Watson MRCVS

Wood Veterinary Group, Gloucestershire, UK

"Heat Detection: A review; From Myth to Magic, to Emerging Science".

Chris graduated from Cambridge Vet School and has been in practice for some 30 years. He is one of 5 cattle vets in a 13 man practice and has published widely in the veterinary press on issues surrounding fertility, lameness and mastitis.

Professor Mark Crow

UCD School of Agriculture

"Summary of the Conference: Have We Progressed over the Last 10 years"

Mark is currently an Associate Professor of Animal Husbandry. He completed his PhD at UCD Veterinary Faculty and took a Sabbatical in 1993 at the University of Michigan in the Reproductive Sciences Program and another in 1996 at the University of Missouri Animal Science Research Centre. His research interests are follicular development, postpartum resumption of ovarian function and early embryo survival.



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The FULL conference program can be
downloaded from the BSAS website
www.bsas.org.uk

For further details please contact:

Dr Melissa Royal (mdroyal@liverpool.ac.uk) - Conference organiser

Mr Richard Sanderson r.o.sanderson@student.liverpool.ac.uk (local student representative)



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MOET trip**

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into Academia**

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building an attractive
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Entrepreneur Scheme**



Open to all undergraduates and postgraduates
Contact Richard Sanderson r.o.sanderson@student.liverpool.ac.uk



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