PROJECT REVIEW

NAME:	**Anne Huting**	**Full Time**	**Year 1**
INSTITUTE:	**Newcastle University**		
TITLE:	**Sorting pigs at weaning in order to reduce variability and improve the efficiency of pig production systems**		

AIMS & OBJECTIVES:

The aim of this project is to reduce variability within pig groups through management and by doing so to improve the efficiency of production systems. Its overall objectives are (i) to investigate the consequences of different management strategies, such as sorting for lifeweight, on life time performance of light, normal and heavy pigs, and (ii) to develop cost-effective feeding regimes for normal and heavyweight pigs. Current evidence on the consequences of sorting appears contradictory. Although it is generally accepted that sorting in general benefits lightweight pigs, it has been suggested that it actually penalises heavyweight or normal weight pigs. In addition there is currently considerable variation in the manner sorting for live weight is practiced in UK pig farms. This probably depends on the production system (i.e. indoor slats vs. straw yards), due to the available pen/ group size of pigs. For this reason the project objectives will be addressed in different production systems. The research would be carried out jointly with Primary Diets, the feed manufacturer that develops specialist feeds for nursery pigs. The outcomes of the research would be cost effective and resource efficient management practices that can be applied in the different UK systems. Through the combination of small and large, Industry-based experiments the research will have immediate applicability.

KEY MILESTONES:

	TARGET DATE:	**ACHIEVED DATE:**
Conduct an investigation into the current practices associated with the management of lightweight pigs at weaning (months 0-6)	April 15	
Investigate the effects of specific management strategies on the performance of light, normal and heavy pigs to slaughter, this will be done in experimental, small scale facilities (months 7-19)		
Repeat the most relevant strategies from above in large scale facilities and estimate their financial consequences (months 20-32)		

PROJECT REVIEW AND COMMENTARY:

I started my PhD in October 2014 and at this moment I am reviewing literature about small piglets. The ultimate goal of my PhD will be: How can we decrease the variation in body weight at slaughter? How can we decrease the contribution of small pigs to the efficienty and cost of production? In addition, can we predict which light piglets are able to improve their performance throughout lifetime (slaughter)? The questions I would like to answer while reviewing the literature are: What is the definition of small pigs? Are all small pigs alike? Can we distinguish between the different groups of small piglets by looking at physical characteristics? Furthermore, how do these small piglets respond to different intervention strategies? I will also address the consequences of the interventions strategies on the performance of heavy or normal pigs, as this is often neglected. The intervention should benefit small pigs whilst not penalising normal/heavy pigs.

POTENTIAL BENEFIT TO INDUSTRY:

The main beneficiaries of the research would be pig farmers who would benefit from the application of cost-effective treatments that aim to reduce the variability in pig live weight on farm and improve the production efficiency of their operations. As the investigations will take into account the practices into the different UK systems (Objective 1), the research outcomes will have wide applicability.

Pig feed manufacturers, such as Primary Diets, will benefit directly from the development and marketing of feeding regimes that will be the direct outcome of this project. Primary Diets expect to provide to their customers advice on how to deal with groups of pigs at weaning. Currently some assumptions made by feed manufacturers and recommendations made to their clients derives from either N American or EU systems and needs to be adapted for the particularities of UK pig systems. This has been identified as a major limitation by the UK pig Industry.

SUPERVISOR(S): Professor Ilias Kyriazakis (Newcastle University) Dr. Ian Wellock (Primary Diets)	**FUNDERS:** BPEX	**DATED:** **31/10/14**