

Batch farrowing

Dr John Carr

Recording the farm based on batch farrowing place – An introduction

Recording and analysis farm output based on the batch farrowing place can be an great technique to help analyse pig production. The major advantage is that the principles can be transferred between farms and systems at ease. The system also predicts the paid deadweight output from the farm and creates targets for the farm to accomplish.

The concept:

The yellow boxes can be customised. The other boxes are calculated within the spreadsheet

Batch	1	week	Parts of a week - 0.5,1,1.5,2 and 3 weeks are the common batches
Numbers bred	24	Females	Note minimum required per batch. Calculation= rounded up(farrowing place)/(farrowing rate) to whole pig
Farrowing rate	84	%	The average farrowing rate
Farrowing places	20	sows	The number of farrowing places available per batch - ideally all-in/all-out
Weaned per farrowing place	10	piglets	Number of piglets weaned per farrowing place
Post-weaning finishing rate	95	%	The number of finishing pigs slaughtered relates to post-weaning mortality
Pigs sold per year	9880	pigs	Calculation= Rounded down(Farrowing places*number weaned per place*finishing rate%*(52/batch time)) whole pig
Live weight	100	kg	The weight of pigs sold to the slaughterhouse
P2	11	mm	The backfat measurement by the slaughterhouse
Killing out %	78	%	Calculation = {66+0.09*(liveweight)+(0.23P2 backfat)}
Dead weight	78	kg	Calculation = live weight * killing out %
Dead weight	765996	kg per year	Calculation = dead weight * pigs sold per year Assumes that all pigs are in the optimal frame
Cost per kg deadweight	1.24	£	Cost of production as based on farmers assessment
Total costs	949836	£	Calculation = dead weight * pigs sold per year
Income per kg deadweight	1.30	£	Income offered by the slaughterhouse - Assumes all pigs are in the optimal frame
Total income	995795	£ per year	Calculation = Income*dead weight * pigs sold per year
Profit	45960	£ per year	Calculation = annual income - annual costs

This then allows for easy analysis for different herd sizes in terms on inputs and costs.

For example if the farm changes the number of farrowing places per batch.

What if analysis: Farrowing place 10 change per batch

Farrowing places per batch	Farrowing places per batch				
	20	30	40	50	60
Bred per batch	24	36	48	60	72
Pigs per year	9880	14820	19760	24700	29640
Total cost K £	950	1425	1900	2375	2850
Total income K £	996	1494	1992	2489	2987
Total profit K £	46	69	92	115	138

This simple model can be made to investigate the various components of the farm. Each of these areas will be examined in more detail to demonstrate how the “Batch farrowing place” can be of use to the whole farm health team.