

PIG e:newsletter

PIG INFORMATION GROUP *Report 05.2016*

Introducing the P.I.G

The Pig Information Group comprises representative experts from SRUC's Research and Education groups and SAC Consultancy who work on various topics relating to pigs. Our primary aim is to enhance communication with those in the pig supply chain. Please visit our dedicated webpage to learn more about the group:

www.sruc.ac.uk/PIG



QUARTERLY MARKET REPORT

Month end date	EU Spec GB SPP (p/kg)	Change on month (p)	Average Pig Weight (Kg)
28/5/2016	117.49	1.22	82.27
23/4/2016	113.49	0.68	83.45
26/3/2016	112.81	0.64	83.34
27/2/2016	112.17	-2.55	83.90

Facts and figures calculated from industry sources (AHDB Pork, Scottish Pig Producers)

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Focus topic – Survival

It is a tough time for the pig industry, how can producers survive the down-turn in the market?

Survival is the keyword in more ways than one. Improving piglet survival will improve efficiency. Reducing mortality by just 0.5% can increase sow output by 10kg/sow/year. Can we achieve 35 piglets per sow per year? How can we manage large litters?

Need an expert?

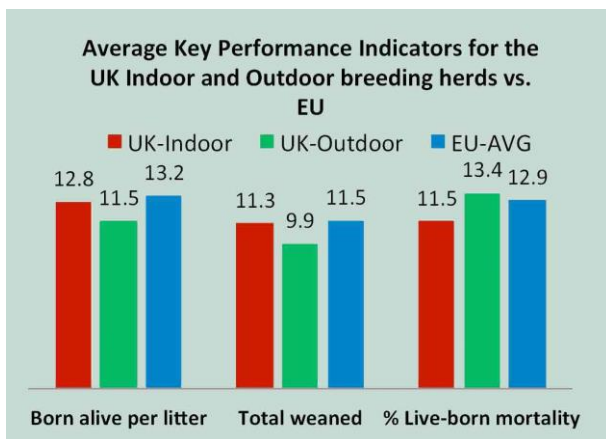
Contact us through our webpage - www.sruc.ac.uk/PIG

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FOCUS TOPIC



Improving Piglet Survival. How is the UK doing?



When you look at averages across Europe the UK is performing well, however top pig producing nations like Denmark continue to out compete with only the top third producers in the UK offering comparable Key Performance Indicators (KPI). The UK actually has less piglet mortality than Denmark, but we also have fewer numbers weaned with the Danes managing to regularly achieve the well documented 35 piglets per sow per year. This is a result of averaging almost 2 extra piglets born alive per litter compared to the UK. There are obvious economic advantages to this - if you can increase born alive by just 0.25 piglets per sow per year you can increase output by 36 kg per sow per year - but only if these extra piglets survive!

Being born into a large litter is one of the biggest risk factors for piglet mortality. Large litters decrease birth weight, increase within litter weight variation and increase competitiveness at the udder so reduces a piglet's chances of getting vital colostrum and then milk. There is more pressure placed on the sow that must have an increased capacity to rear extra piglets and the stockperson must fine tune management to help her as much as possible, as well as deal with any extra piglets. Balancing breeding goals to select for numbers weaned not just numbers born is a key survival strategy. Understanding the different challenges of large litters can help us manage them better. Researchers at SRUC have been working with the Danish Pig Research Centre (SEGES) studying large litters.



Breeding for numbers weaned not just numbers born enhances piglet survival

What's coming next?

Each newsletter we will introduce members of the P.I.G. and focus on different topics.

Our October issue will Focus on Health with Dr Carla Gomes and Dr Jill Thomson bringing you news from SRUC Research and SAC Veterinary Services.

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“...modern hyper-prolific sows can take 7.5h to give birth...they should be prepared for a marathon when they are about to farrow.”



Managing large litters

The Sow:

The modern day hyper-prolific sow has increased her farrowing duration by as much as 150 minutes, which means she can take 7.5h to give birth compared to a “standard” sow taking 4h.



So sows should be prepared for a marathon when they are about to farrow. Fatigue is a risk. Nutritional interventions in late gestation and throughout lactation are just a few ways to lower risk and allow her to raise piglets to an optimum weaning weight.



Feed higher fibre especially in later gestation – Why? High fibre has been shown to have a positive effect on the farrowing process, stillbirth rate and colostrum yield. It also helps sows have greater gut fill, reducing feelings of hunger. Keeping high fibre content when they move to the farrowing house also reduces constipation which can impact on farrowing duration.

Feed higher protein and amino acid levels in lactating sows – Why? It stops the sow drawing from her own body reserves.

Don't forget water intake – Why? High water intake has been linked to high weaning weights. Monitoring water intake can be a good early warning indicator of health problems.

The Piglet:

Piglets can need a helping hand even when litter size does not exceed functional teat number. Small piglets will find it difficult to compete with larger littermates.

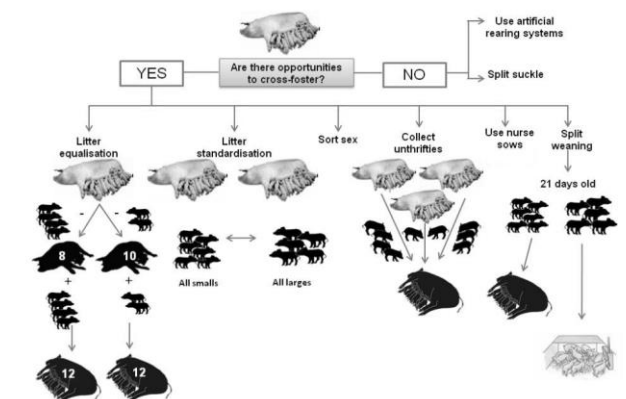


Small piglets may need assistance to suckle but large piglets can have difficult births, meaning they need assistance too. Meconium staining is a sign of a difficult birth.

But big piglets may have suffered oxygen deprivation. Look out for meconium staining (brown afterbirth often with black flecks staining the piglets skin) as it can be a sign of a difficult birth. Make sure these piglets get warmth. They may need assistance to suckle.

Fostering – when, who, where?

There are different fostering strategies used to even up piglet number or standardise for size of piglets. Don't foster before every piglet has had a chance to get at least 6h-12h of colostrum. Split-suckling can help achieve this. Piglets are not the limiting factor when it comes to colostrum intake. The bare minimum they need is 100ml within 16h of birth, but they can take much more than that and they need to have colostrum within 48h of being born for immunity, warmth and nourishment.



Possible management interventions for large litters based on the opportunities to cross-foster. Image adapted and reproduced court of Videncenter for Svineproduktion, Axelborg, Denmark.

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35 piglets per sow per year can only be achieved by using a system to help raise surplus piglets. The Danes use nurse sow systems where sows are used as foster mothers to rear surplus piglets. The nurse sow must be specially selected as she will be asked to rear a second litter.



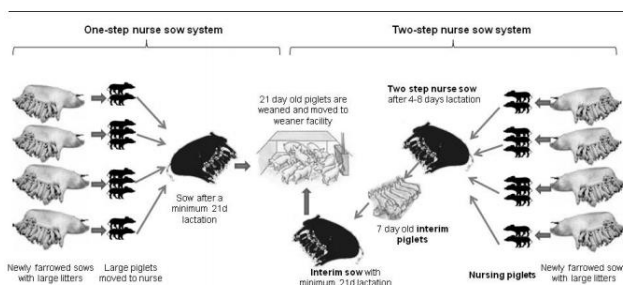
Should I foster? Don't foster if you don't have to. If there is no fighting and the weight is quite even, leave the litter undisturbed. Try not to over-foster by moving piglets multiple times. It is a false economy as piglets will keep fighting to try and own a teat, resulting in lesions, wasted energy and disrupted milk let-down.

Should I move the largest or the smallest? It is generally thought that moving the larger piglets is better but it is not always that simple – you might be better making decisions based on udder quality. For example udder size, teat shape and teat size can vary. Little piglets cannot always reach the top row of teats and if teats are too large little piglets cannot suck easily. In this case match teat size with piglet mouth size. You should also make decisions based on who is fighting. If you can watch a suckling before fostering and two piglets are obviously fighting over the same teat, use a stock marker to mark one of them and move it when you are ready to foster.

Does it matter which sex I move? It might. Males are more vulnerable to pre-weaning mortality than females. It might be best not to challenge males by moving them to another sow unless you have no choice. However if you home-breed replacement gilts it might be best to leave them on their mother. Evidence suggests that in gilt piglets uterine development is activated from birth via colostrum and milk-borne biochemical signals. There is also evidence that elements of maternal behaviour are learned in the neonatal period.

The Nurse Sow:

When litter size routinely exceeds functional teat number in a batch you need a way to rear these extra piglets. 35 piglets per sow per year can only be achieved by using a system to help raise surplus piglets. The Danes use nurse sow systems where sows are used as foster mothers to rear surplus piglets. Nurse sow strategies involve moving whole litters in a one-step or two-step process. This can limit the amount of fighting at the udder but must be very carefully managed.



Nurse sow systems. Image reproduced courtesy of Videncenter for Svineproduktion, Axelborg, Denmark.

Who are nurse sows?

The nurse sow should be specially selected as she will be asked to rear a second litter. Nurse sows are chosen for their body condition, good milking ability and calm temperament. They are often parity 2 or 3, can maintain their body condition well during lactation and have shown good numbers weaned with their previous litters.

Home work – Do you want to know more?

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Watch this space

SRUC continues to work with SEGES and the University of Copenhagen on nurse sows and has a PhD project with Teagasc called “*Keeping weak piglets alive*” which is studying:

- Nurse sow strategies
- Rescue Decks
- Energy Supplements

Watch this space for more information on outcomes.