

1A-102: *Managing the sow to stimulate lactation ovulation*

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Aims and Objectives:

The development of commercially viable and natural methods of stimulating lactation oestrus. Specifically:

- Determining the effects of split weaning (permanent removal of a portion of the litter) on lactation oestrus expression in boar exposed sows
- Determining the optimal day of lactation on which to commence boar stimulation

Key Findings

The current data is the first to demonstrate that boar contact on its own, when conducted in a detection mating area, can be used to stimulate a high proportion of sows to exhibit a rapid and synchronous oestrus and ovulation during lactation.

The use of daily boar contact from day 18 of lactation onwards represents an efficient and “natural” method of inducing lactation oestrus, thus maintaining commercially viable farrowing to conception intervals and allowing piglet age at weaning to be increased.

Providing multiparous sows with 15 - 20 minutes of daily, physical boar contact in a detection mating area from day 18 of lactation onwards is an effective method of stimulating a rapid and synchronous lactation oestrus, and appears to negate the need to reduce the suckling intensity by remove piglets.

79% of multiparous sows suckling 11 piglets, and receiving physical boar exposure in a DMA exhibited a lactation oestrus and a subsequent total born of 11.0.

A rapid and synchronous lactation oestrus was also obtained when suckled litter size was reduced to 7 piglets on day 18 of lactation and sows received fence line contact with a mature boar in a detection mating area.

More specifically, split weaning in conjunction with fence line boar exposure in a DMA resulted in high incidences of lactation oestrus (83.3 - 94.4 %, and subsequent total born of 11.6 - 13.5 piglets).

Application to Industry

The ability to extend sow lactation length without compromising the efficiency of the breeding herd allows piglet weaning ages to be based on piglet needs rather than the need to maximise farrowing frequency. Considering increased retailer and consumer interest and awareness of management practices, the ability to use natural methods (namely boar exposure) to stimulate sows to express oestrus, ovulate and conceive during lactation, as well as produce commercially viable farrowing rates and litter sizes is an important outcome for the pig industry.

Boar exposure is a process that most stockmen are familiar with, and therefore little additional training would be required if this strategy was adopted.

The use of physical boar contact, in a DMA, appears to negate the need to modify suckled litter size (split weaning) and may mean that temporary separation of the piglet from the sow is unnecessary to achieve high incidences of lactation oestrus, along with good sow fertility and fecundity