



# HOG-UPDATE

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## SEASONAL INFERTILITY

By Jamie Kuyt

Seasonal infertility is characterized by a difficult time breeding sows, lower conceptions and an increase in abortions. This occurs in the summer months with higher temperatures and a shortening of daylight hours (after June 21<sup>st</sup>). Summer matings result in fall and winter farrowings, which historically would result in poor piglet survival due to cooler temperatures. Thus sows are more difficult to breed in the summer.

Seasonal infertility causes serious changes in sow performance. Records indicate that born alive per sow per week, which takes into account the effects of litter size and farrowing along with the proportion of sows farrowing in a week, drops from .49 to .46. This is the equivalent of a 1.6 pig per sow per year drop from summer breedings.

Here are some strategies to lessen the impact from seasonal infertility.

Lets start in the farrowing rooms. Sows will eat less during the summer months. Improve feed intakes by providing fresh, good quality feed and removing any spoiled feed quickly. Adding water to feed can help intake, but feed will spoil more quickly.

If intake is still an issue, an increase in the energy and protein, in particular lysine, density of the lactation ration can help to maintain the energy balance in the sow to improve re-breeding. This can easily be achieved by adding roasted Soya beans to the ration in the summer months to increase in the dietary metabolic energy content of the feed. Be sure that feeders are emptied or cleaned daily to avoid rancidity and ensure a fresh quality diet is always available. Feeding smaller amounts more often (ie. From 2 up to 3 feedings/day) can help maintain feed quality and intake.

Check that mechanical equipment is working properly. Fans need to be clean and functioning. Inlets should open and close freely and be unobstructed. Drip coolers provide relief to the sow, but nozzles need to be clean or replaced to prevent blockage or continuous running of water.

At weaning, identify sows that were not eating well or are entering their second parity. These sows may not return to estrous well and hormone therapy may be beneficial. This involves injecting the sow with hormones (PG600) the day of weaning. This increases the likelihood of sows expressing estrous and successful mating. Another practice to try is placing younger sows beside older sows if weaning into stalls. The older sows will "encourage" the younger sows to come into heat.

During the summer, breed more animals. Sounds simple, but actions need to take place now. Gilts need to be purchased now and acclimatized for 60 days to be available for summer mating. Consider breeding cull animals after weaning. If your breeding target is met and conception is good, then the cull animals can be shipped in three weeks. However, if your target is not achieved the bred culls are available to farrow.

Weaned sows may express weaker estrous during the summer. As mentioned, maintain good intakes in the farrowing room. At weaning, full feed a lactation ration until animals are bred. Feed additives are

available to feed from weaning to breeding, which will enhance the sow's expression of estrous. Exposure to the boar before and during mating will also improve the expression of estrous. Also, sows may have a shorter heat cycle, which may lead to single mated sows. Consider adjusting your interval between mating to insure sows are double mated.

As always, semen storage is important. The cooling unit needs to operate at 17 °C with minimal fluctuations. A recording devise as simple as a high-low thermometer should be in the cooler to ensure temperature fluctuations have not occurred. The inside of the cooler should be dry. The fan on the cooler should be clean so air can circulate freely.

Consider the lighting in the barn. The duration of daylight needs to be longer in the breeding barn (12 hours) than in the farrowing rooms (8 hours). Installing timers on the lights allows for automatic turn on and turn off to achieve desired duration of daylight in the perspective barns. To maintain a viable pregnancy, there should be 12 to 16 hours of light. The intensity of light is important. A rule of thumb is that a newspaper should be able to be read in the darkest part of the barn. Remember any automatic feeding equipment may block the light from reaching the sow. Also, cleaning lights will improve intensity. A light meter is available from the office to measure the light intensity.

Lastly, summertime is holiday time. Employees and owners need time away. Proper training of replacement workers in the farrowing and breeding barn will maintain good performance during the summer.

By implementing the mentioned strategies, the impact of seasonal infertility will be minimized and production targets maintained.

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**WANTED** – 3-week-old weaners. Can take 80 - 100 weekly or 160 - 200 bi-weekly or 400 per month. Contact BSC for more information.  
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**HOG UPDATE** is published in the interest of helping hog producers become more profitable. We welcome your comments.

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Vitamin A stabilized	2 000 000 I.U./kg
Vitamin D3 stabilized	600 000 I.U./kg
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#### INDIVIDUAL DOSAGE:

Sows: 50 g per day for 7 days or more if necessary to a maximum of 10 days. Feed from weaning to breeding (may start a few days before weaning if necessary).

#### BENEFITS:

- Favours appetite
- Increased oestrus signs
- Increases ovulation rate

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