



Swine Vet Center P.A.
1608 So. Minnesota Ave.
P.O. Box 269
St. Peter, Mn. 56082
Phone: 507-934-3970
Fax: 507-934-3968
www.swinevetcenter.com

Seasonal Infertility

We are currently in the seasonal infertility period. It happens every year and is one of the reasons there is a better hog market in the summer time versus the rest of the year. This period is typically the time of year when it's more difficult to keep sows pregnant. The time frame is usually from Week 29 to Week 40 of the year.



There are several factors involved with the infertility problems but generally, the biggest reason is the summertime heat that occurs from Week 29 to 33 (it can occur even sooner if hot weather starts earlier). This year we may see even more problems than usual because of the intense heat and humidity we've been experiencing.

Often what happens is sows come into heat a little later than usual post weaning. This is generally due to poorer feed consumption in lactation due to the heat. This decreased lactation consumption then causes the sows to come back into heat later and as a result we see increased weaned to estrus intervals and less sows bred by day 7. Generally, sows bred in this

time frame are more likely to have normal 21-day returns and poorer conception rates. It can also have an effect on total born litter size in the next litter as well. The extent of the heat and how it's managed will determine how severe the effects are.

Another effect is seen most commonly in Weeks 34-40 and is related to the changing day length due to the shortening of the photoperiod (daylight). This results in sows having more pregnancy losses. Generally, what we see is more irregular returns to heat. This can also result in more NIP (Not In Pig) sows once we get to mid-November and December (because the piglets are lost after the 2nd signal of pregnancy and before the skeleton calcifies and forms a mummy).

The best thing that can be done to compensate is to increase the breeding target during times of seasonal infertility. To do this, you need to have more gilts available in this time frame or retain more of the production culls for an additional litter. Today generally, the effects are relatively small (2-3%), so breeding this many additional animals is fairly easy to achieve. Using your herd's records is the best way to make sure you have the right numbers. Since hot weather is part of the problem and this can vary every year it is difficult to know exactly what the right number is, but this can get you close. Remember watching the weekly conception rates and adjusting breeding is also helpful but you will have at least a 3 to 4-week lag depending on when opens are identified. Make sure to do a 50 to 60-day reconfirmation pregnancy check as well as 70-90 day visual appraisal during the shortened day length time frame to identify any sows that lost their litters after the first pregnancy check. This way there are fewer NIPs and sows can either be bred back or culled quicker resulting in less non-productive sow days.

Fair season begins and is under way:

From recent MN Board of Animal Health publication...

The Minnesota Board of Animal Health reminds livestock owners to review their responsibilities before exhibiting animals at their county fair or other events this summer. Animal health is a shared responsibility and is part of overall public health, especially at events that bring people and animals together.

In general, animals should have official identification and be free from infectious, contagious or communicable disease, including ringworm and warts. Any animals coming to Minnesota from another state need to be inspected by a veterinarian before movement and move with a Certificate of Veterinary Inspection (CVI) and permit (if required) filed with the Board of Animal Health. Proper identification and records allow for a quick and thorough response to minimize spread of animal disease.



Sow Mortality and Prolapse Study Review

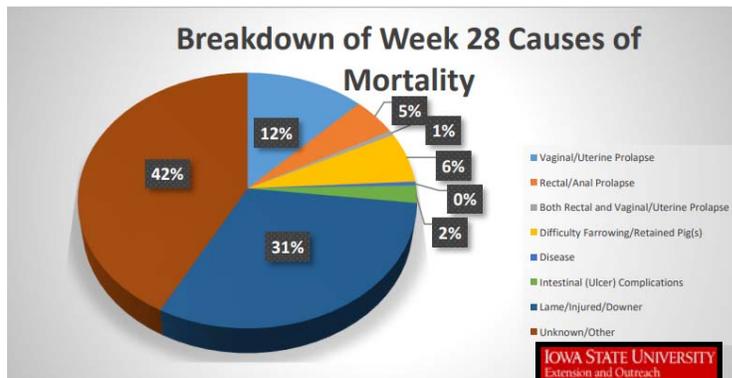
Dr. Jason Ross and Amanda Chipman, Iowa Pork Industry Center- Iowa State University, recently spoke about Sow Mortality and Prolapse Study Review at the Iowa Swine Day and National Pork Industry Council meetings.

Over the last several years it has been noted that there has been a significant increase in sow mortality and pelvic organ prolapses. Since the causes are not clearly understood the National Pork Board has funded a study to identify risk factors associated with pelvic organ prolapse. This study is designed to define the scope of the problem, identify the industry's risk factors and provide a setting for future research to be able to look at different interventions.

The study has had excellent industry participation with 104 farms enrolled (85 farms from 13 production systems plus another 19 independent farms) totaling 400,000 sows from 15 different states.

Once farms enrolled in the study they reported sow mortalities on a weekly basis and were given standardized forms to collect the data. The average number of mortalities per week range from 600-800 sows and are classified into 7 reasons.

You can see the week by week overview of the sow mortality results in this study by going to <https://www.ipic.iastate.edu/reproduction.html> and click the "click to expand" link.



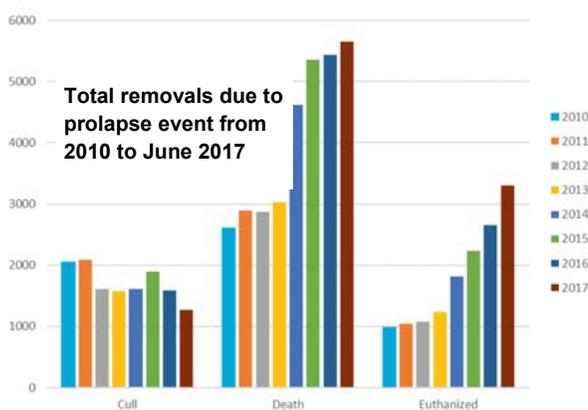
Some farms were chosen for a more in-depth study. These farms filled out a detailed survey and additional information and samples were collected. There was a total of 62 farms and 5000 sows scored and observed for this part of the study.

Data collected includes:

- Herd factors: inventory, diet, prior mortality and prolapse incidence, disease history and gilt size at first breeding
- Facility factors: water/feed delivery, stall housing, environment
- Management factors: A.I., cleanliness, farrowing assistance, feedback and vaccinations, pen/stall management, culling criteria
- Animal based measures: specific production stage, assistance at previous farrowing, genetics, lameness score, perineal region score, tail dock length, body condition score and genital-anal distance
- Records and data integrity: previous year's production and mortality records and communication with farm staff to ensure mortality causes are accurately defined

The Pelvic Organ Prolapse score that was developed was able to predict a higher frequency of prolapses. So far only very preliminary data has been reviewed and additional information as it comes in will continue to be analyzed. On all farms the average sow mortality was at 13% with the best 20% of herds being at 7%. Pelvic organ prolapses accounted for 3% of the sow mortality, up from a traditional 1% of mortality. There is a lot of variation in farms in the amount of Pelvic Organ Prolapse ranging from 1% being the best and 7% being the highest.

More data will continue to be generated going forward. This is just starting to scratch the surface of this important work and the industry anxiously awaits more information to help to answer these problems.



Please help support further research in this area to be able to not only identify risk factors but also be able to test potential solutions.

In the September 5th, 2017 edition of Feedstuffs, Drs. Henry Johnson and Brad Leuwerke of Swine Vet Center along with Brad Eckberg of Metafarms put together some interesting data involving Pelvic Organ Prolapse.

The graph to the left you can see how the pelvic prolapse problem has increased over the last few years. Total removals in the graph include culls, natural deaths and sows euthanized due to prolapse, from MetaFarms Inc. database. Due to the variety of removal reasons used by production systems within MetaFarms Sow platform database, all rectal, vaginal and uterine prolapses were categorized as a similar prolapse event.

The entire article can be found here: http://swinevetcenter.com/feedstuffs/johnson-leuwerke_prolapses.pdf

SVC Office Hours: Monday through Friday 7:30 AM to 5:00 PM

No portion of this newsletter may be used/copied without the written consent of Swine Vet Center.