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Effect of heat stress on sow fertility and health

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High summer temperatures increase the chance that sow herds will be exposed to heat stress. Heat stress in sows causes a longer weaning to estrus interval, decreased farrowing rates and failure to maintain pregnancy. Conception rates of sows are also particularly lower in the summer than any other breeding season. When sows are bred in the summer, they farrow smaller litters and the average piglet weaning weight is significantly smaller than other seasons. The purpose of this research project is to directly test the effect of heat stress on sow health and fertility at the South Farm Complex in coordination with the Animal Science Research Center (ASRC) at the University of Missouri. Thermal temperatures were taken at the ear, shoulder, rump, tail and rectum for a group of sixteen sows on alternating days for two months. Sow body weight, loin muscle area (LMA) and backfat (BF) measurements were taken at three specific points during the study: the first day of the trial, the day the sows were moved into farrowing, and the day sows were moved into breeding .Once parturition occurred, information regarding the number, health and weight of each piglet was recorded. The results from this project will be compared to a previous heat stress study performed at the Brody Environmental Center within the ASRC. The study concludes that heat stress affects the sow's reproductive efficiency and health, but when and where the elevated temperatures specifically affect each sow and her offspring will be further discussed.