

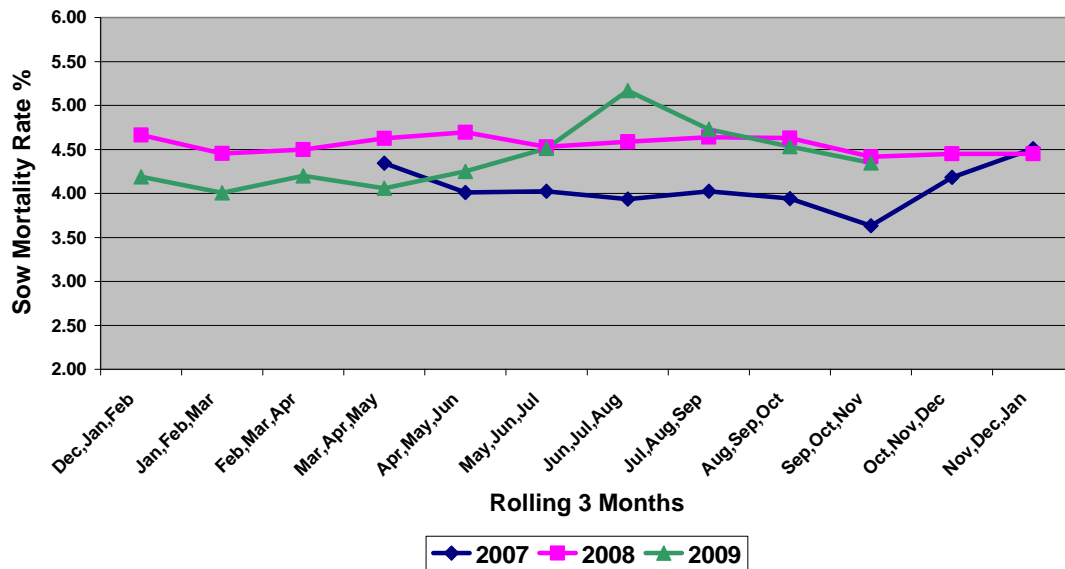
NADIS BPEX Commentary – January 2010

. Death of sows can be a substantial cause of lost production to the breeding herd. Analysis of individual herds shows that mortality is split between natural deaths (heart failure, disease, etc) and euthanasia on welfare or economic grounds – usually associated with either leg problems or poor condition.

National figures produced by BPEX indicate annual sow mortality averages between 4 and 5 %. The more concentrated NADIS surveillance mirrors this picture across all herds within the survey but of course averages hide individual extremes with some herds experiencing annual losses in excess of 10%.

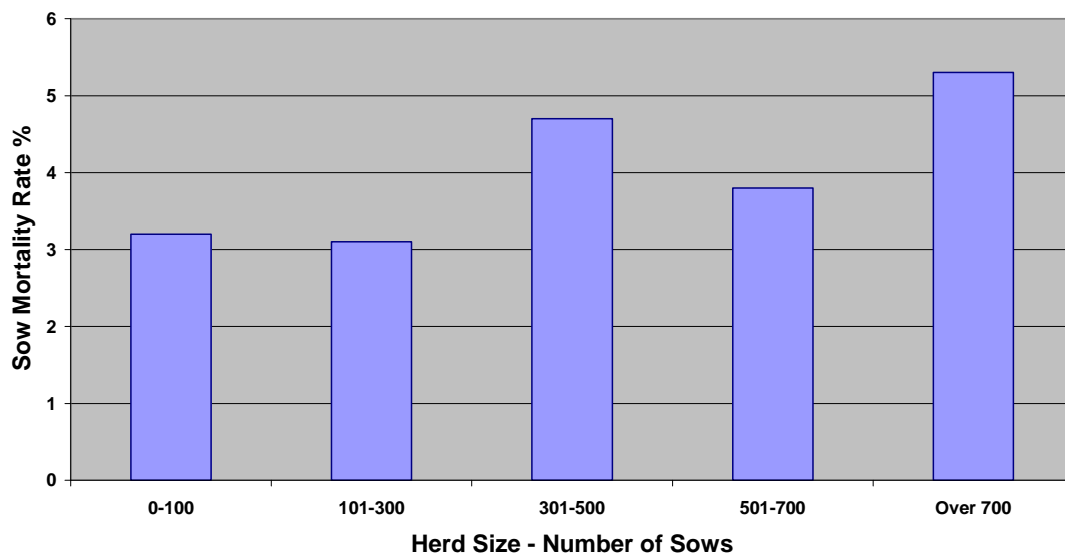
Interestingly, whilst the mortality reported by NADIS remained fairly constant in 2008, far more fluctuation has occurred in 2009 with summer death rates 25% higher than those recorded in the spring (graph 1). At that time, some individual herds were reported to have suffered heat related losses (heat stress) and this may account for this pattern.

Graph 1 - Sow Mortality Rate (2007-2009)



There is a tendency for percentage mortality to rise as sow herd size increases (graph 2) a picture again mirrored in national figures. (BPEX Yearbook 2009.)

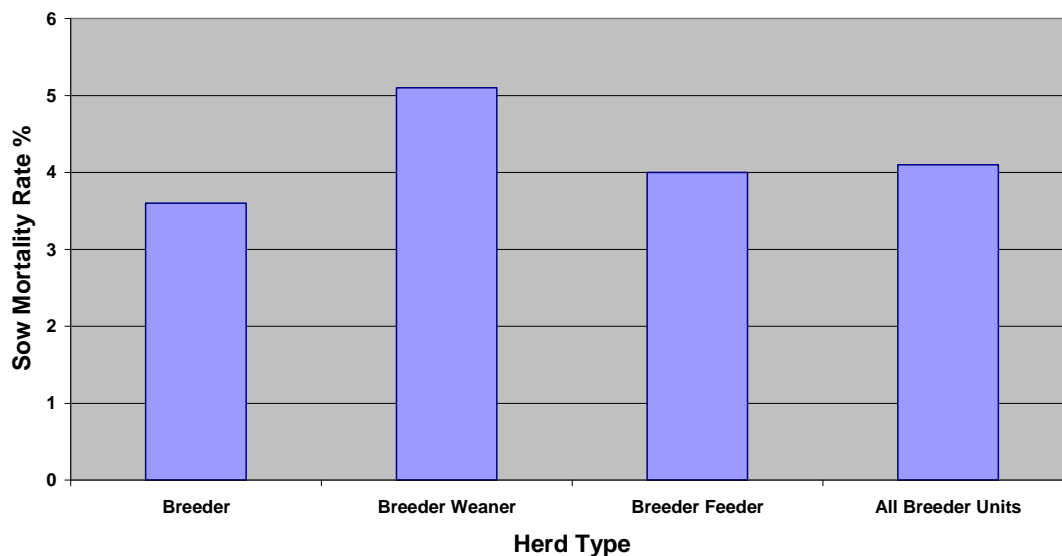
Graph 2 - Sow Mortality Rate - Herd Size



Within the NADIS surveillance population, breeder weaner farms suffered higher levels of loss than breeder feeders (or indeed the small number of breeding only units). There is no

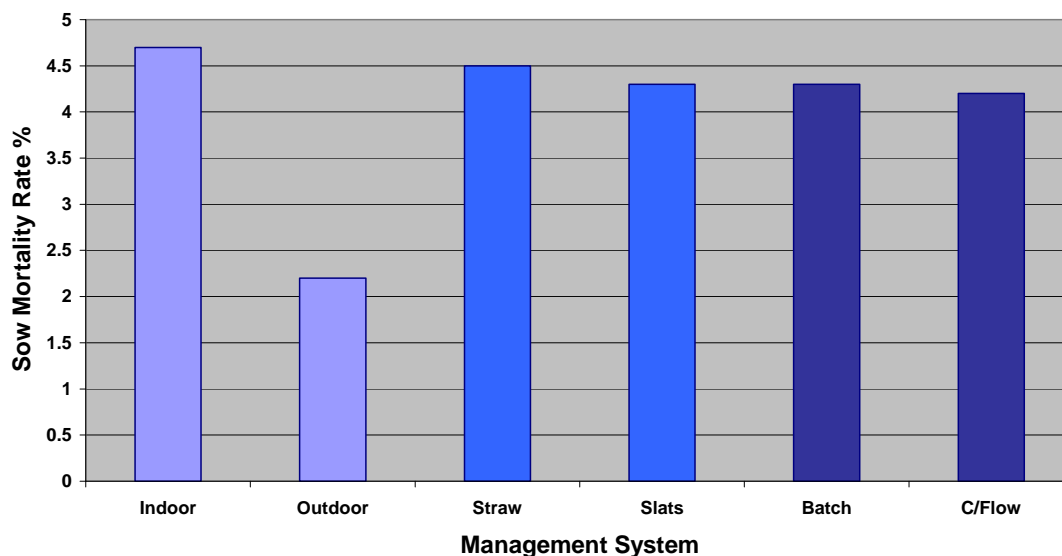
inherent biological reason for this and may simply be a reflection of herd size based on the presumption that weaner producers tend to be larger herds (graph 3).

Graph 3 - Sow Mortality Rate - Herd Type



One of the most noticeable divergences from BPEX national data (albeit from 2008) is the difference in sow mortality between indoor and outdoor herds. In the BPEX data outdoor herds had slightly higher sow mortality than indoor herds (4.58% v 3.93% - 2009 yearbook). However, within the NADIS population indoor mortality was double that recorded outdoors (4.7% v 2.2%) (graph 4). This is an area that might benefit from more detailed investigation.

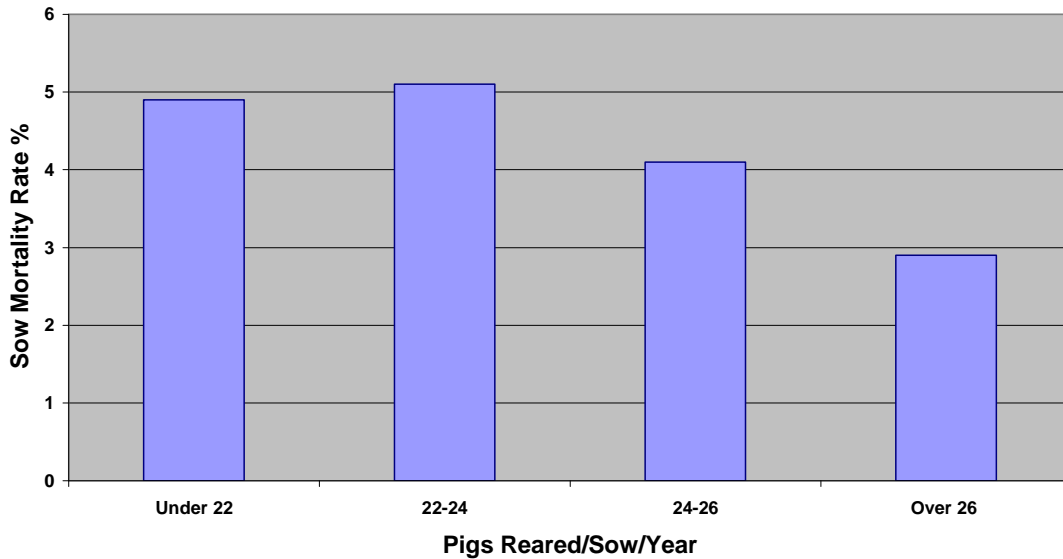
Graph 4 - Sow Mortality Rate - Management System



There is no difference between sows housed on straw or on slats – suggesting that supposed more “welfare friendly” conditions (straw) have little impact on sow mortality within the surveyed population. Losses measured between batch and continuous flow systems are similar.

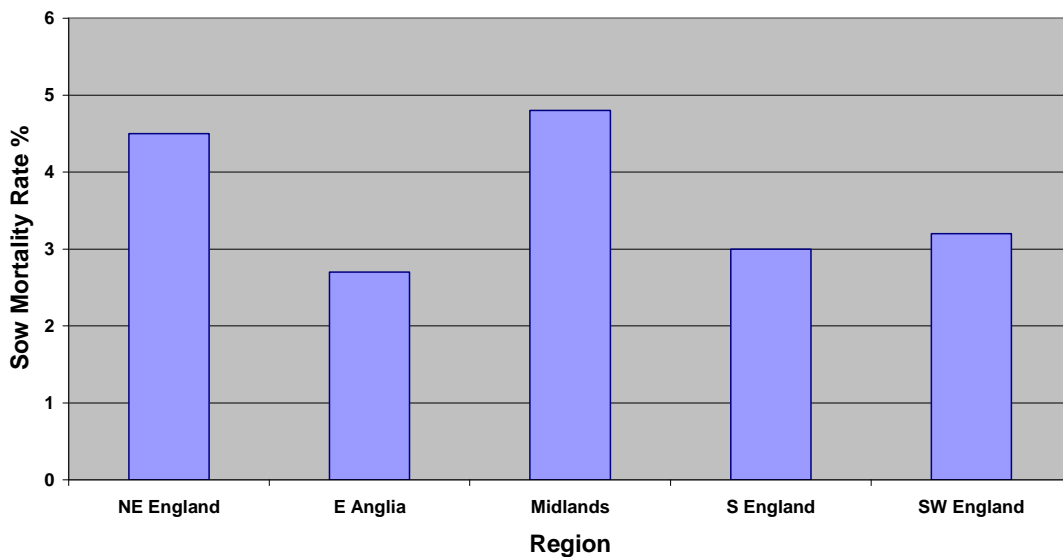
There is a widely held view within the industry that “pushing sows” harder – i.e. achieving higher levels of productivity – has a deleterious impact on mortality. The NADIS data does not support this view with the most productive herds (those producing 24 pigs reared per sow per year or more) averaging below 4% mortality, whereas those less productive have 25% more losses (graph 5). (It should be noted that NADIS has a tendency to report in higher production farms with more than 50% of its reported herds exceeding 24 pigs reared per sow per year)

Graph 5 - Sow Mortality Rate V Pigs Reared/Sow/Year



Finally, a marked geographical trend is seen in sow mortality (graph 6). Within the two main pig producing areas, herds in North East England report nearly twice the death rate of those in East Anglia (4.7% v 2.7%) but it can be speculated that this simply reflects the difference between indoor and outdoor herds with the latter concentrated in East Anglia within the reported population. Little can be read into the data outside these two regions as the number of herds involved are small.

Graph 6 - Sow Mortality Rate - Regional



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