BPEX 2TS

Action for Productivity

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BREEDING

Condition scoring of sows

Sow body condition is a critical factor affecting health, welfare, productivity and longevity. Maintaining optimum condition within the breeding herd throughout the sow's lifetime, with minimal fluctuations, will help reproductive performance, production efficiency, strategic culling decisions and mortality rates. Ideally a sow's body condition should be individually assessed and managed on a continuous basis to maximise her lifetime productivity.

It is important to be able to accurately evaluate sow body condition and to ensure appropriate nutrition is provided to every sow for maintenance, growth, reproduction and lactation, preventing sows becoming either too thin, through having to utilise body reserves, or too fat with excessive weight gain.

Achieve an optimal average condition score of 3 throughout the breeding herd

Minimise variation within condition scores

Feed to body condition to maximise reproductive and productive efficiency

Visual and manual assessment of body condition

- Assessing body condition is not purely an assessment of backfat; in modern lean genotypes body condition score is an indication of the animal's overall muscularity and in fact is a poor indicator of fat cover or fatness
- Score sows at key times throughout the reproductive cycle, eg at weaning and service, mid-way through gestation and pre-farrowing, as well as on an ongoing basis during lactation
- Ensure feeding levels are appropriate and adjust them if necessary
- Sows, which have lost body condition during lactation, should not be placed on low protein diets to increase fatness; the diet must be balanced for protein and energy to support the re-gain of muscle mass and associated fat cover to reduce their risk of developing shoulder sores
- Assess sows by considering the shoulders, ribs, backbone and hips, not just one location. Score the sows by touch, using the palm of the hand and by eye where this is not possible
- Score the sows on a scale of 1 – 5
- A visual assessment is relatively subjective but the descriptors overleaf should help you to be more objective

Condition scoring of a sow by touch

Figure 1 Descriptors to help with your condition scoring

1	**EMACIATED**
	Shoulders, individual ribs, hips and backbone are visually apparent
2	**THIN**
	Shoulders, ribs, hips and backbone are quite easily felt when pressure is applied with the palm of the hand
3	**ACCEPTABLE/OPTIMAL**
	Shoulders, ribs, hips and backbone can only be felt when pressure is applied
4	**FAT**
	Shoulders, ribs, hips and backbone cannot be felt even when pressure is applied
5	**GROSSLY FAT**
	Fat deposits are clearly visible

Condition score 2.5

Note

- Half scores may be used for mid ranges
- Avoid variation and extremes. Ideally sows should enter farrowing with a body condition score of 3 to 3.5 and complete a 4-week lactation scoring 3 to 2.5 as a minimum
- Very thin sows may not come into oestrus promptly post-weaning, or be able to maintain the pregnancy, support adequate foetal development or be able to consume enough feed for a good lactational yield
- Excessively fat sows may have farrowing and leg problems, produce small litters, have low feed intakes during lactation and wean lighter litters
- If there is a wide range of body condition within the breeding herd or significant numbers of sows in either of the extreme categories, a whole-herd review of the nutrition, management and health programmes is required

Condition score 3.5

Remember

- Routinely check your own assessment with your colleagues and also with that of an experienced third party, eg your herd vet
- Visual and physical condition scoring is the ideal method of assessing sow condition
- Diets should be formulated to meet protein and energy requirements taking into account requirements to support body lean gain in gilts and young sows to maintain them in good body condition at all times
- Speak to your nutritionist for advice on feed levels for each stage of production and condition score

For more information and advice contact:

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Action for Productivity

Gilt Management: Selection to puberty

Good management and selection of gilts is fundamental for maintaining a productive herd. At any time 20 – 25% of production should be from gilts. A typical 45% replacement rate means that nearly half the herd will have been replaced during the year. Performance from, and management of, this parity therefore, has a large impact on overall productivity and profitability.

It is especially important to ensure that there are sufficient gilts available to serve in the correct condition, at the required time. This enables the planned culling of old or less productive sows and maintenance of the target herd parity profile. The most productive established herds, eg older than three years, have stable parity structures with a high proportion of sows in parities 3 – 5, indicating the ability to retain young sows in the herd.

Maintain a gilt pool, from 90 kg to service, of at least the equivalent of 12% of the target herd size

Maximise the number of gilts achieving puberty

Manage the culling policy to maintain an optimum parity profile

Management guidelines

Maiden gilts

Emerging evidence suggests that the environment in which a gilt is reared during her suckling, nursery and finishing stages, as well as during her period as a maiden gilt, can have an impact on her lifetime performance.

Aim to provide an environment that:

- Supports and maintains healthy gilts
- Does not expose gilts to mycotoxins
- Does not compromise growth

Isolation and acclimatisation

- Place purchased gilts in an isolation facility prior to entry onto the main unit
- Develop an acclimatisation and vaccination programme in conjunction with your veterinarian to ensure gilts, both homebred and purchased, aren't challenged on entering the sow herd
- The period gilts are kept in isolation will vary, so the following management procedures may occur during this time, or once the gilts have entered the main unit

Outdoor kennels provide typical housing for the homebred gilts until they are 12 weeks old, with a target weight of 40 kg.

An example of a gilt rearing facility – good light, floor surface, air quality, ad lib feeding and a space allowance of at least 0.65 m^2/gilt.

Stimulation of puberty

Farrowing index, also referred to as litters/sow/year, tells us the average number of times sows farrow in a year. Puberty is a critical period that should be proactively managed and recorded. Important factors implicated with a gilt's ability to achieve puberty include:

Age: The modern gilt is leaner than previous generations and tends to reach puberty later. It is important not to expose pre-pubertal gilts to mature boars, as they become habituated to the boar stimulus and subsequently have an extended period to puberty. Start boar stimulation when the youngest gilt in the group is 180 days of age.

Space: Space allowance should be at least 1.5m^2 and preferably 2m^2 per gilt

Air quality: Good with little evidence of ammonia

Light: Provide 14 – 16 hours of good quality light (at least 50 lux)

Boar stimulation: The table opposite shows the different degrees of boar contact typically provided. The boar should be at least 10 months old and express a high libido. Using boars in rotation will increase the impact of boar contact.

- For best results combine moving, mixing and initiation of boar contact simultaneously, using gilts at least 180 days of age
- Check for oestrus at least once a day with a boar
- Mark pubertal gilts and record date of heats; the group will often show a synchronised oestrus
- Handle and interact with gilts in a quiet and considerate manner

Options for boar contact

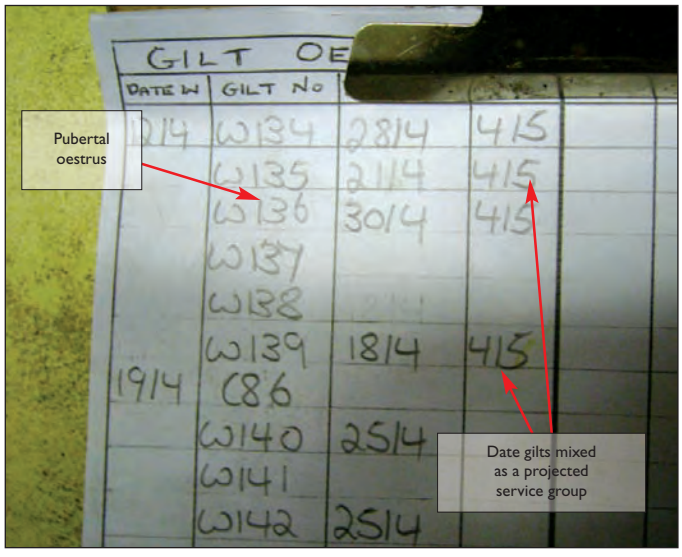
Type of contact	Frequency	Time	Efficacy (where 1 is good and 4 is poor)
Full	Constant	Constant	1
Full	Twice a day	At least 10 mins	1
Full	Once a day	At least 20 mins	2
Adjacent pen	All day	Constant	3
Aerial, vocal, visual	All day	Constant	4 (no stimulation)

Full contact, irrespective of whether housed adjacent or separate from the gilts, is essential to optimise the effectiveness of the boar stimuli. Discuss the pros and cons of running a vasectomised boar with the gilts with your vet.

Recommended management at puberty

- Record pubertal gilts' ID using existing tag/spray mark
- Change spray marker colour every week, for a period of three weeks
- Enter number of gilts available into projected service week to assist with culling decisions
- Mix into weekly groups if possible to simplify their feeding programme
- Distribute projected service dates across paddocks where unsupervised natural service is used
- Identify non-cycling gilts; develop a standard operating procedure for managing anoestrous gilts and set a maximum age at service
- Where Regumate® is used, only select cycling gilts to receive it; Regumate® is not effective on pre-pubertal gilts

Example record sheet



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