

Pig Fact Sheet 7

EXPLAINING EMPTY DAYS

On our visit rounds, we are often confronted with the question "What is a reasonable figure for empty days for this unit and why are mine so high?" In order to answer this question, it is important that the possible contributing factors to this figure are understood.



This fact sheet aims to explain what empty days are and how your empty days figure is derived.

What are empty days?

Empty days are defined as any day that falls outside the production cycle i.e.

Gestation = 115 day average
Weaning to service = 5 day average
Lactation = 25 day average

This gives a total sow cycle of 145 days for a unit weaning at 25 days as an average. If you assume that 100% of sows become pregnant at their first service (very unlikely!!!) then the maximum achievable farrowing index for that unit can be calculated as follows:

$365 \text{ days} / 145 \text{ days} = 2.51$ possible production cycles per sow per year.

Obviously, this is an unachievable target. The current national average for all breeding herds until end September 2006 is a farrowing index of 2.26 with the top third achieving 2.34 (excluding unserved gilts). A farrowing index of 2.3 should be an achievable target on most units.

Using this figure it can be calculated that with a farrowing index of 2.3, the sow cycle becomes 159 days long (as opposed to 145). Therefore an empty days figure of 14 days per sow per cycle is an acceptable figure on a unit that is weaning at 25 days.



What factors contribute to the empty days figure?

1. Maiden Gilts

Maiden gilts will not be recorded as within a productive cycle until they have been served. Depending on how the unit is recording incoming gilts, this may add to empty days on the unit.

2. Culling Policy

The level to which this affects empty days depends very much on the unit and how culls are recorded. People classically site that sows hang around on a unit before culling now longer than previously (especially with the current FMD restrictions) and are therefore contributing to the number of days empty. If culling date is recorded truly as the day that these sows leave the unit this may lead to an increase in the empty days figure. This inaccuracy can be removed by recording the cull date as when the animal moves into the culling paddock. However, this may lead to a false elevation in feed usage across the productive herd. As long as you understand how the records are kept on your own unit then you can adjust the acceptable level of empty days appropriately.

3. Barren Sows or N.I.P's

These animals should be picked up promptly through the utilisation of routine ultrasound scanning for pregnancy at 4 and 7 weeks of gestation. This will only be a benefit if this information is used to form a culling policy and if animals are disposed of promptly.

4. Returns to Service

A high rolling return rate can be hidden on a dynamic serving system but may become evident if the empty days figure increases. Accurate individual sow recording in combination with ultrasound scanning can allow earlier identification on returns in this type of system.

5. Mortality of pregnant sows

This is a figure that is often forgotten. If an animal is in the mid – late stages of pregnancy when she dies then the entirety of her pregnancy will be classed as empty days as no litter is produced. This is not the case however for animals that die within the productive cycle e.g. during lactation or during the weaning to service interval.

In summary, it is important firstly to establish the achievable farrowing rate on your unit. From this figure you can calculate what the acceptable empty days figure per sow cycle is. This can then be compared to the actual figure and the possible contributing factors examined in some detail.