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## Question to EURCAW-Pigs: Space allowance calculation in an on-farm situation

30 June 2021

### Question

Received: 9 March 2021

EURCAW-Pigs received the following question from a veterinary inspector at a government of one of the Member States:

*Context:* In relation to space allowances, we sometimes struggle with the calculation of stocking density in commercial situations as pigs are placed in a pen at a certain weight and as they grow the stocking density increases over time. In some situations a small number of pigs are removed over time to keep the stocking density appropriate, in other situations no pigs are removed (due to all in all out policy). This creates challenges for calculating and regulating stocking density at different stages of the production cycle. Accordingly, the question is:

- *What are commonly accepted methodologies for calculating the stocking density of a pig pen?*

### Answer

A EURCAW-Pigs expert contributed to the response below. The EURCAW secretariat did the final editing, and may be contacted for queries: [info.pigs@eurcaw.eu](mailto:info.pigs@eurcaw.eu).

The space allowance at any time should be calculated as the amount of available space to a group (in m<sup>2</sup>) divided by the number of animals in the group. To assess compliance with the legislation, directive (EU) 2008/120 provides a system of weight bands linked to the space requirement per pig. The total space required by all pigs in a pen according to their weight band, should be the minimum amount offered in that pen.

Counting the numbers of pigs and measuring the dimensions of the pen are relatively simple. The challenge is to assess individual pig weight. A procedure reported by the authors to be accurate to within 3% can be found on the [The Pig Site](#) (accessed 2 April 2021).

- "Place a tape measure under the pig just behind the front legs and measure the circumference of the pigs girth in metres. This measurement is known as the Heart Girth.
- Then measure the Length of the pig along its back from the base of its ears to the base of its tail, again in metres.
- Square the Heart Girth to get the Girth Result.
- Now Multiply the Girth Result by the Length and multiply by 69.3
- You now have the weight of your pig in kg.

Example:

- Porky Pig has a Heart Girth of 1.27 meters and a Length of 1.02 meters.
- Squaring the Heart Girth (1.27 x 1.27) = 1.6129 = Girth Result
- Multiply the Girth Result (1.6129) by the Length (1.02) and multiply by 69.3 = 114 Kg".