

“Sow group housing and mixing”



Herman Vermeer

“Understanding pigs”

Group housing sows, organic pigs, entire males, farrowing pens, long tails, welfare assessment, housing design,



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Group Housing Sows – Questions summarized

- Most common group housing systems
- Length of side walls – free space
- Fixation
- Floor design
- Feeding: Individual rations and preventing competition
- Roughage
- Mixing without problems
- Stable groups for small farms



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Most common group housing systems

- Variation across Europe
- Minimizing negative consequences of aggression after mixing
- Preventing competition around feeding
 - Lock doors of Free Access Stalls
- Preference for individual feeding or sorting options
 - in FAS or ESF
 - however many suboptimal systems in converted houses

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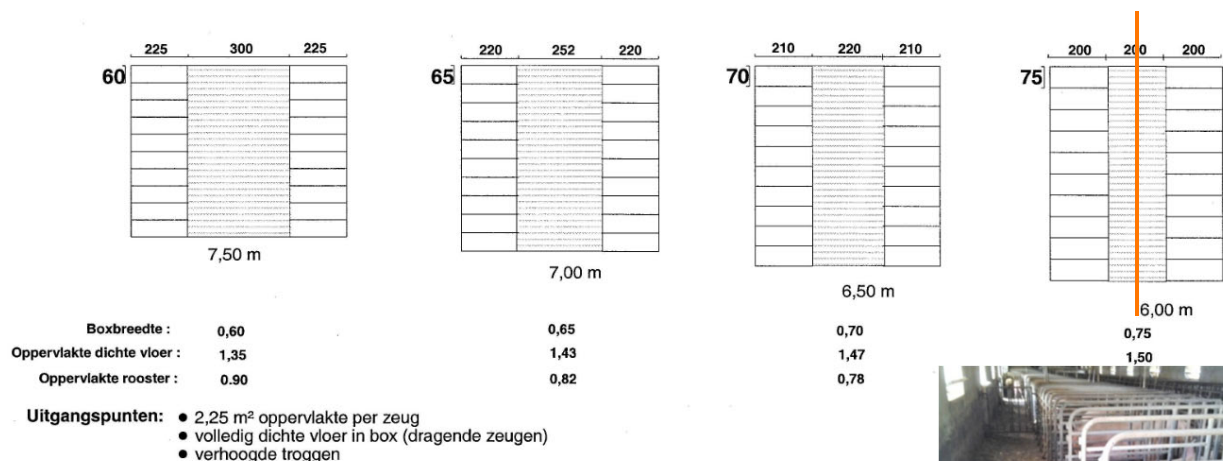
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Length of side walls – free space

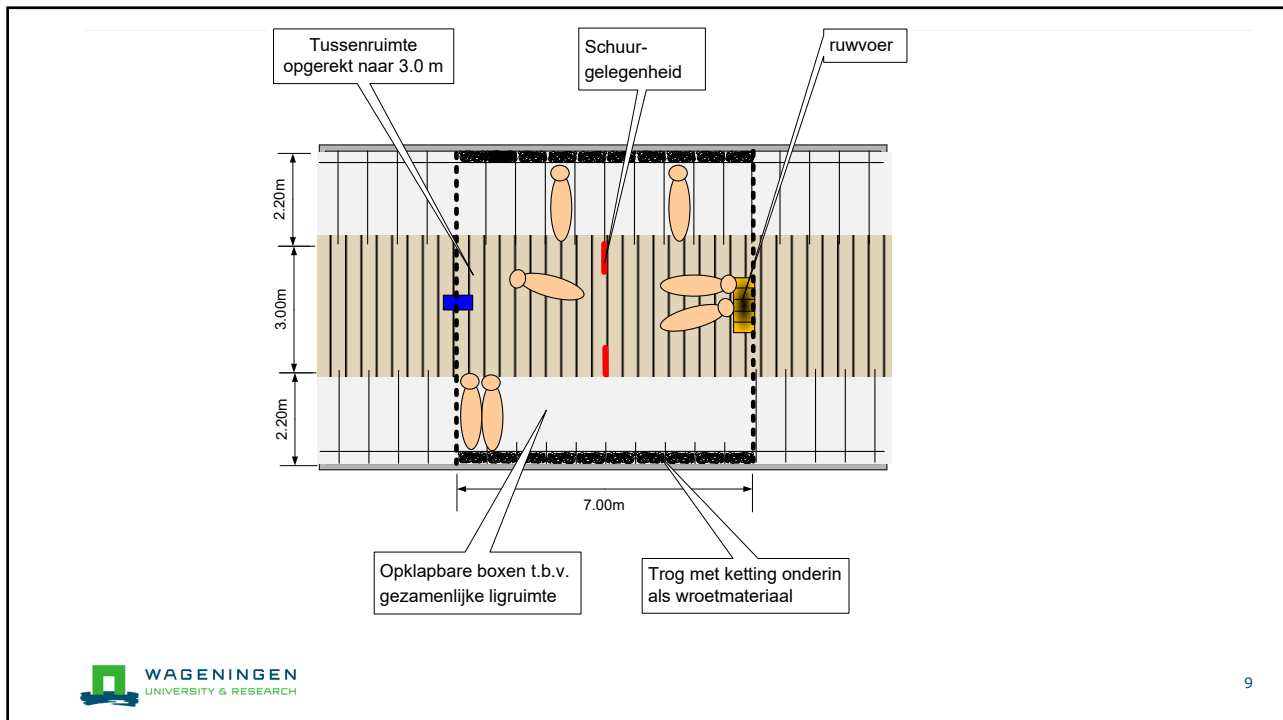
- Space was part of a project on 70 pig farms, published in 2010:
- Sows + gilts within 4 d after insemination in group
- More than 3 years experience with the system
- No major changes in system in the last two years
- 70 farms visited
- Management, performance, animal measurements

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Ratio between stall width and space between rows



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Width between two rows of stalls

	25 % worst	25 % best
Farrowing rate	< 83,3 %	> 89,0 %
Width between stalls (m)	2.75	3.23

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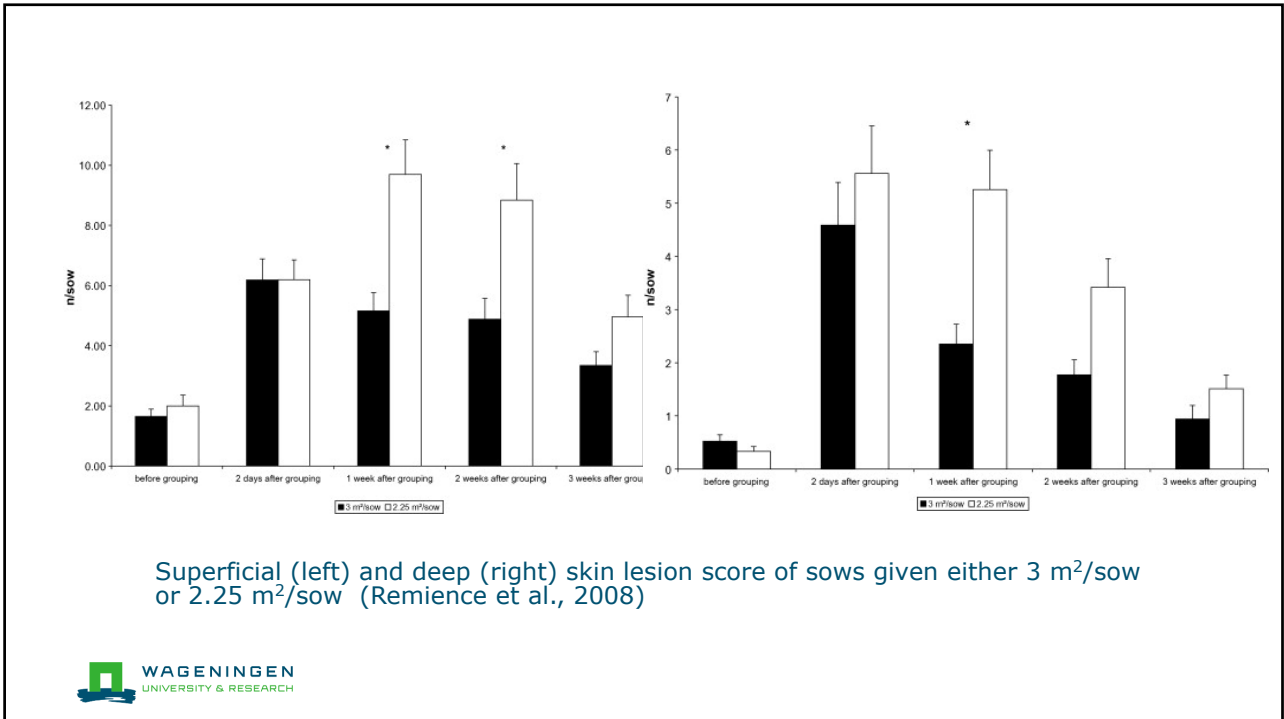
Space per gilt (rearing, before insemination)

	25 % worst	25 % best
% culled sows during cycle 1 and 2	> 10,1 %	< 4,9 %
Space (m ² / gilt), last pen before insemination	1,2	1,9

Space during pregnancy

	25 % worst	25 % Best
% culled sows during cycle 1 and 2	> 10,1 %	< 4,9 %
Living space (m ² / sow)	2,0	2,4

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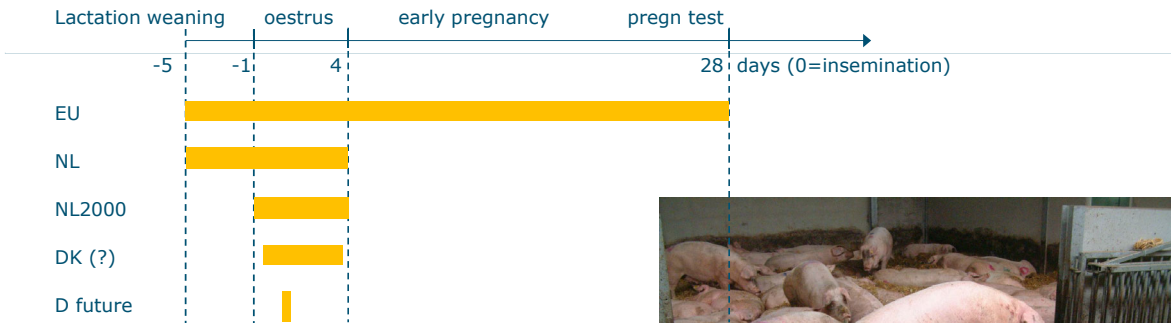
However success mainly depends on management Quotes of some succesful farmers:

- *"Adviser and vet shouldn't say what I'm doing well, but say what I have to change."*
- *"I don't take all advise for granted."*
- *"I discuss about the advice and take a decision after careful weighing."*

Management:

- Working in a structured way
- Working accurate
- Working consequent
- Change when necessary
- Record data
- Feeding based on animal condition
- Inspection of (ES)Feeders
- Use attention lists in ESF

Fixation around insemination

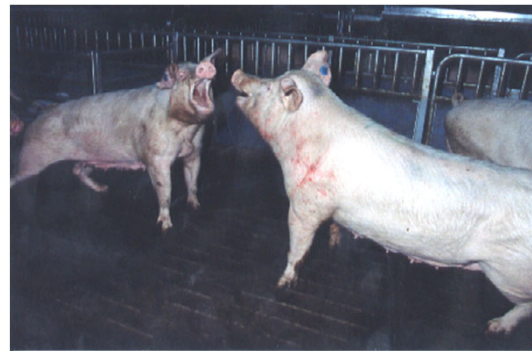


- Mixing at weaning positive to prevent aggression after service
- Space allowance and floor critical
- Organic pigs have outdoor access



Mixing without problems

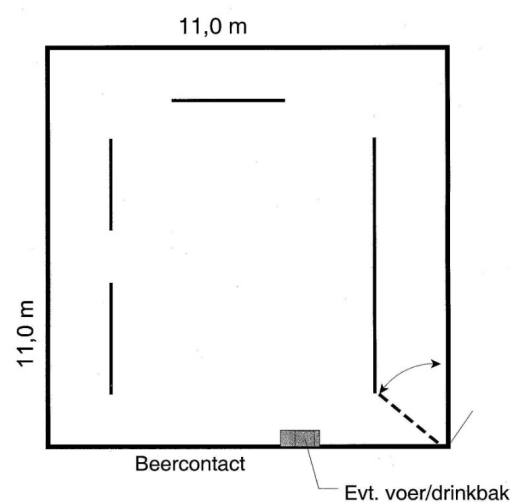
- Some practical examples
- Try to reduce number of mixing moments
- Try to optimize mixing conditions
- Social skills for gilts: Social training



Minimizing the consequences of aggression: 4-5m² space, dry floor, ad lib feed and water



Arena for 30 sows



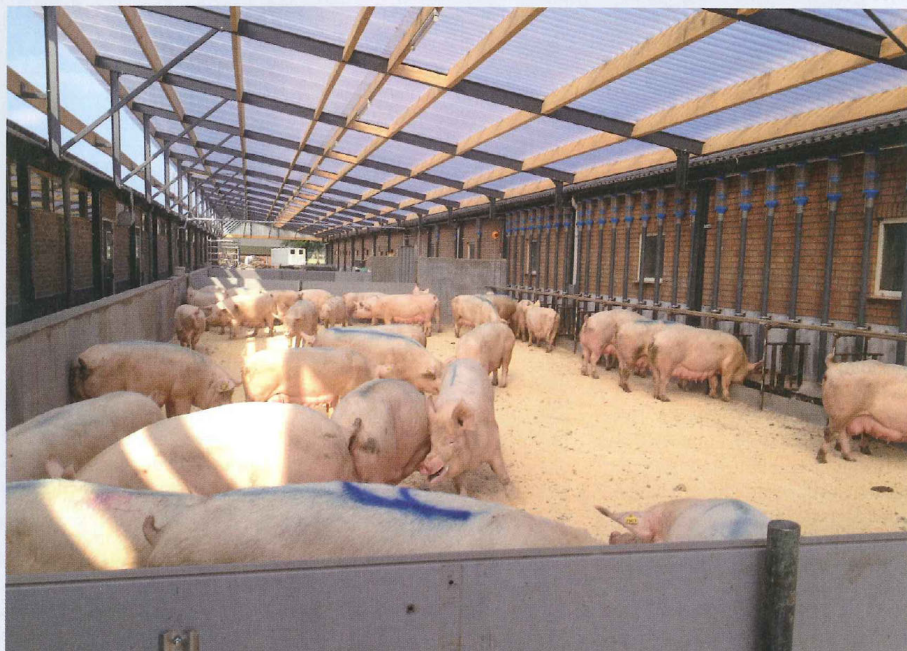


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'Loungeroom' bevordert rust in zeugenstal

Bij de nieuwbouw van zijn zeugenstal bouwde varkenshouder Jan Vogels in Erp (N.-Br.) een overdekte ruimte om de zeugen die uit de kraamstal komen een dag te 'parkeren'. Met deze uitloop creëert Vogels op de speendag ruimte om andere zeugen te verhuizen. De uitloop, met een aflopende betonvloer met zaagsel, laat zeugen ook aan elkaar wennen voordat ze naar de zeugenstal gaan met stabiele groepen en voerstations. Zodoende zijn er minder rangordegevechten als de zeugen na inseminatie bij elkaar komen, is de ervaring van Vogels. Hij noemt de uitloop 'loungeroom'.

De varkenshouder doet zijn zeugen binnen vier dagen na inseminatie in de groep. Hij werkt met weekgroepen van 55 zeugen.



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Floor design

- To prevent lameness a dry, clean floor is a basic requirement, preferably with some litter
- Definition of solid floor: EU 15% openings, DK 10%, NL 5%
- How to “compensate” for gilts, which need only 1.64 m² ?
- 1-2% slope of solid floors towards slatted/drained area

Feeding: Individual rations and preventing competition

- To provide every sow with her nutritional needs, a feeding system in which she can eat safely is necessary.
Trough feeding (dry or liquid) and floor feeding can result in high levels of competition with negative effects on welfare and production.
- In Free Access Stalls groups should be sorted on parity, body condition and pregnancy stage.
Flexible fences between groups give the necessary flexibility.

Roughage

- EU-Directive: *“all dry pregnant sows and gilts, in order to satisfy their hunger and given the need to chew, are given a sufficient quantity of bulky or high-fibre food as well as high-energy food”*
- Sows are much more quiet when given roughage in the trough, on the floor or from a rack.
- The daily amount can be maximized on the level that prevents the slurry removal system to become blocked.
- Question: What other enrichment is suitable for sows?

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Stable groups for small farms

- Sorting requires a certain sow group size
- Similar for crossfostering and producing larger groups of piglets
- Multi-week system creates larger groups at weaning
- Three week system fits (4 wk lactation)
- Four and five week systems wean at 3 weeks of age: often too young
- Even three production groups possible (7-7-7 weeks)

EURCAW Group Housing Sows – Dec 2020

- Further reading:
- EUWeINet Factsheets on Group housing of sows
- - [D5 Appendix 7](#)
- - [D5 Appendix 8](#)
- - [D5 Appendix 9](#)
- - [D5 Appendix 10](#)
- - [D5 Appendix 11](#)



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