

EURCAW Regional Meeting Southern Europe

Suggestions on 'Introducing gilts to groups'



Introducing gilts to groups

- Not all sow housing systems are the same
- Gilts have difficulties to adapt to a new group
- Is 4 weeks after insemination the best time?
- Can enrichment facilitate group housing
- Are there regional differences?

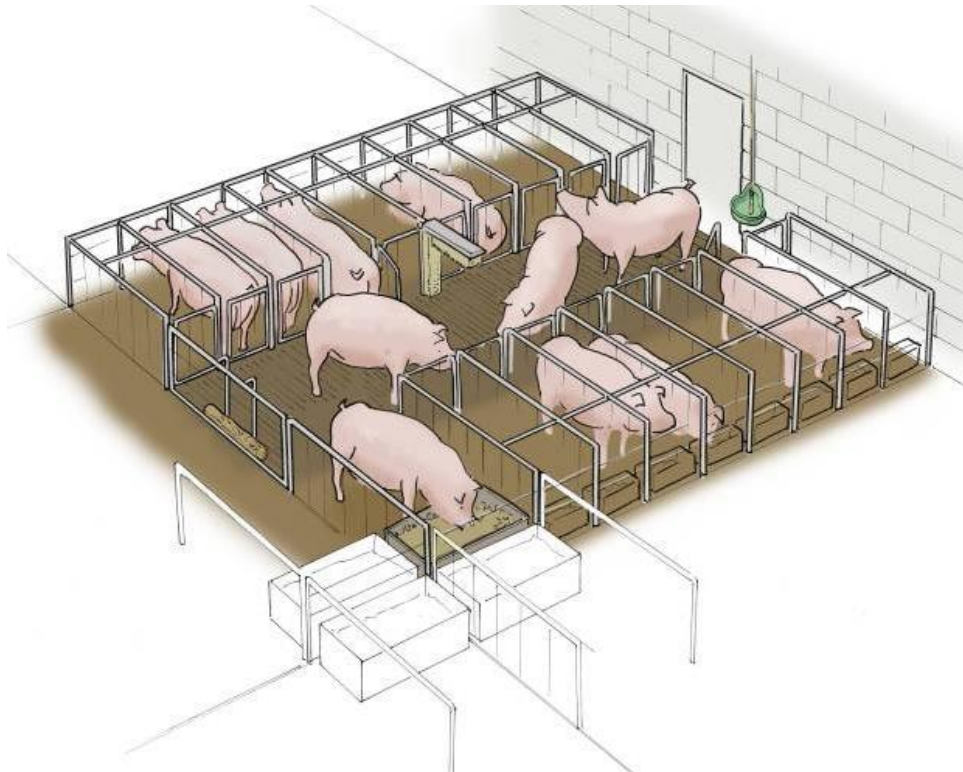


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There are different group housing systems

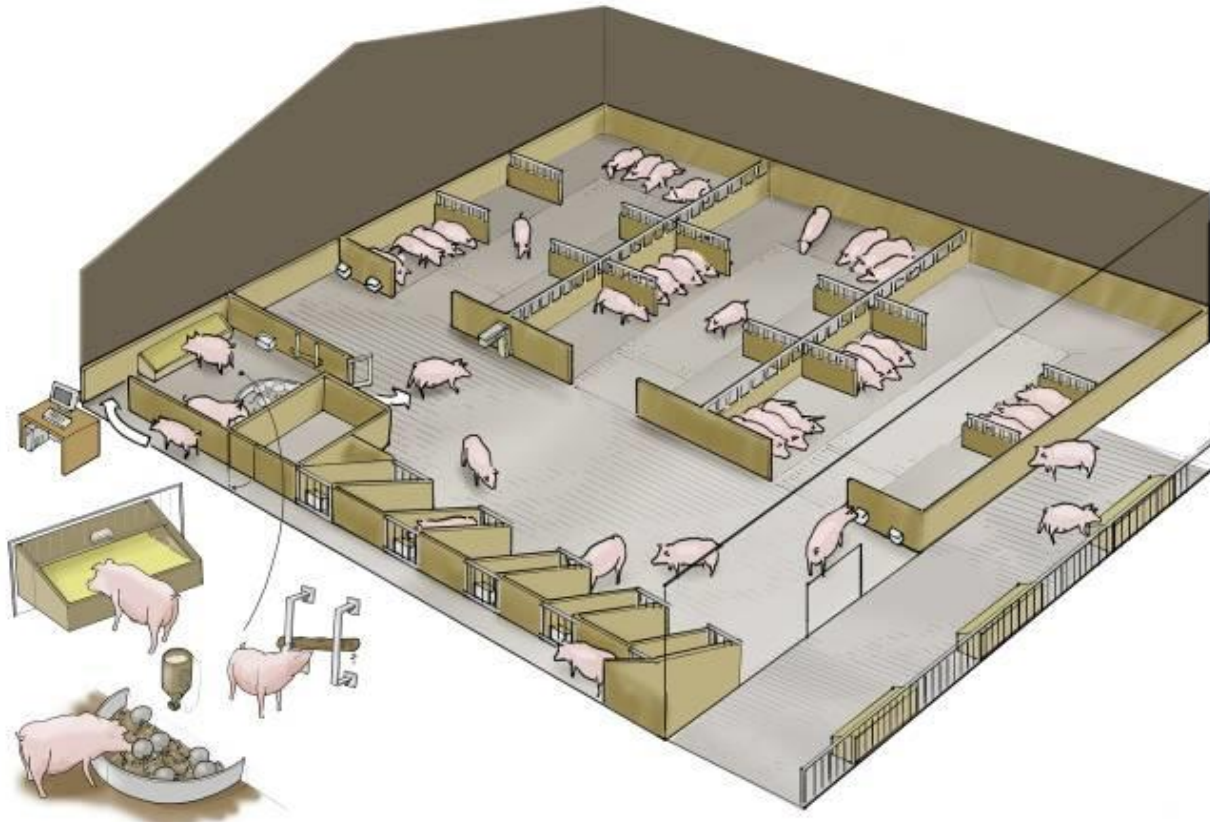
Free Access Stalls

groups of 15-40, sorted on age + pregnancy



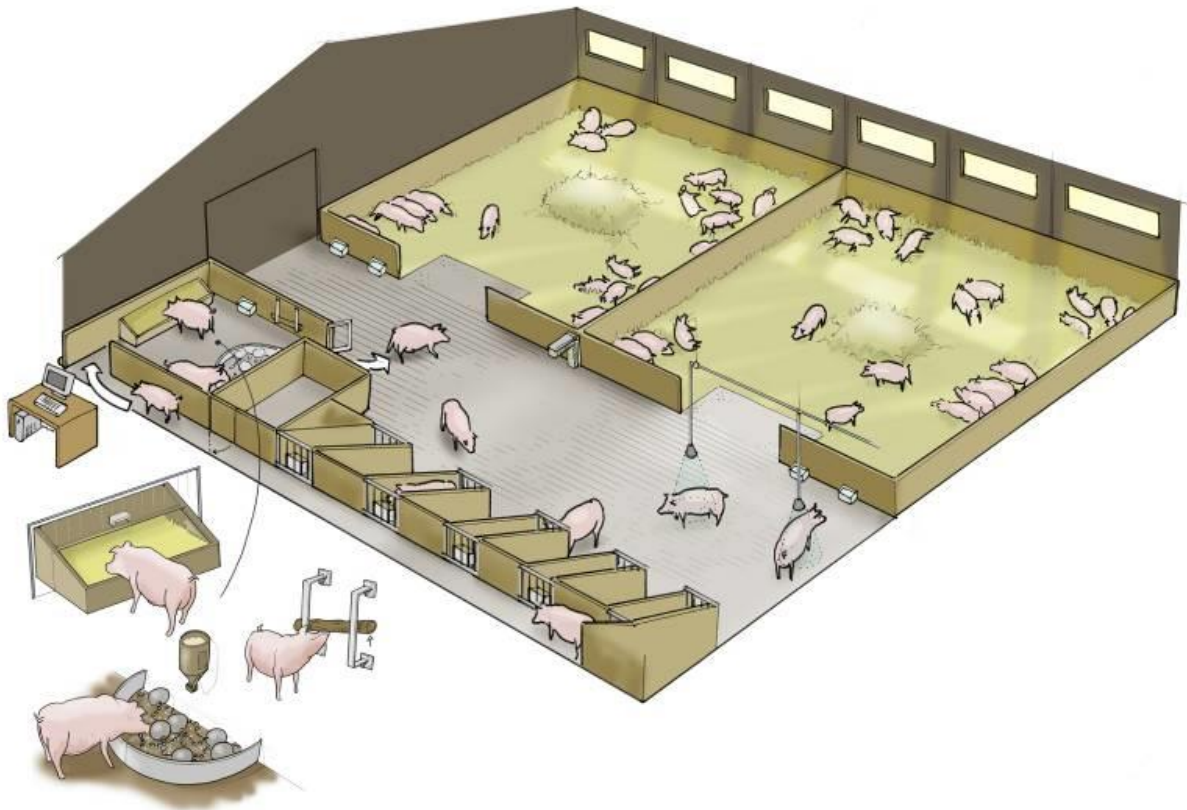
Electronic Sow Feeding (ESF)

– mainly dynamic, but larger farms also static groups



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Electronic Sow Feeders



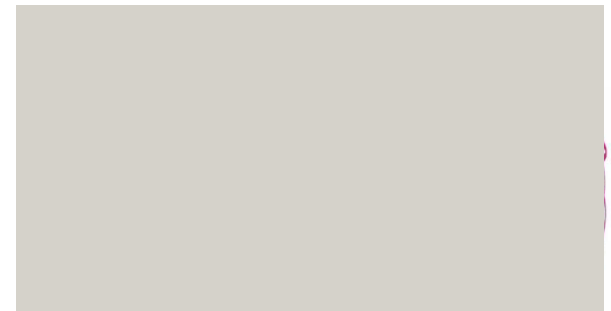
Feeding stalls



Biofix / trickle feeding



Fitmix



Long trough

System comparison – Rosmalen (NL)

- 1994 to 1996
- From weaning to farrowing (excl days in oestrus)
- Individual in stalls
- Free Access Stalls
- Biofix/Trickle feeding
- Electronic Sow Feeding (ESF)

Performance 1994–1995

	Indiv. stalls	Free access stalls	Slow feeding	ESF
N litters	377	373	401	395
Farrow.rate	84.0	83.6	85.7	85.6
Liveborn	10.7	10.9	10.7	11.0
Weaned/ sow/year	22.1	22.5	22.2	22.1

	Indiv. stalls	Free access stalls	Slow feeding	ESF
Oral activity post feeding %	32.4^a	20.4^b	26.7^{ab}	9.4^c
Claw problems %	8.4^a	10.4^a	17.8^b	19.5^b
Labour 170 dry sows (h/y)	287^a	285^a	293^a	207^b
Controllability (high=negative)	1.0	2.2	3.2	3.7
Annual costs (% from ind. stalls)	100	130	93	86



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Aggression and group housing

Aggression and group housing

■ Competition for resources

- Largely avoidable
- Food, water, lying space

■ Establishing social rank

- Is normal & unavoidable
- Try to minimise impact
- At least 0.5 year after conversion extra attention



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Minimising competition

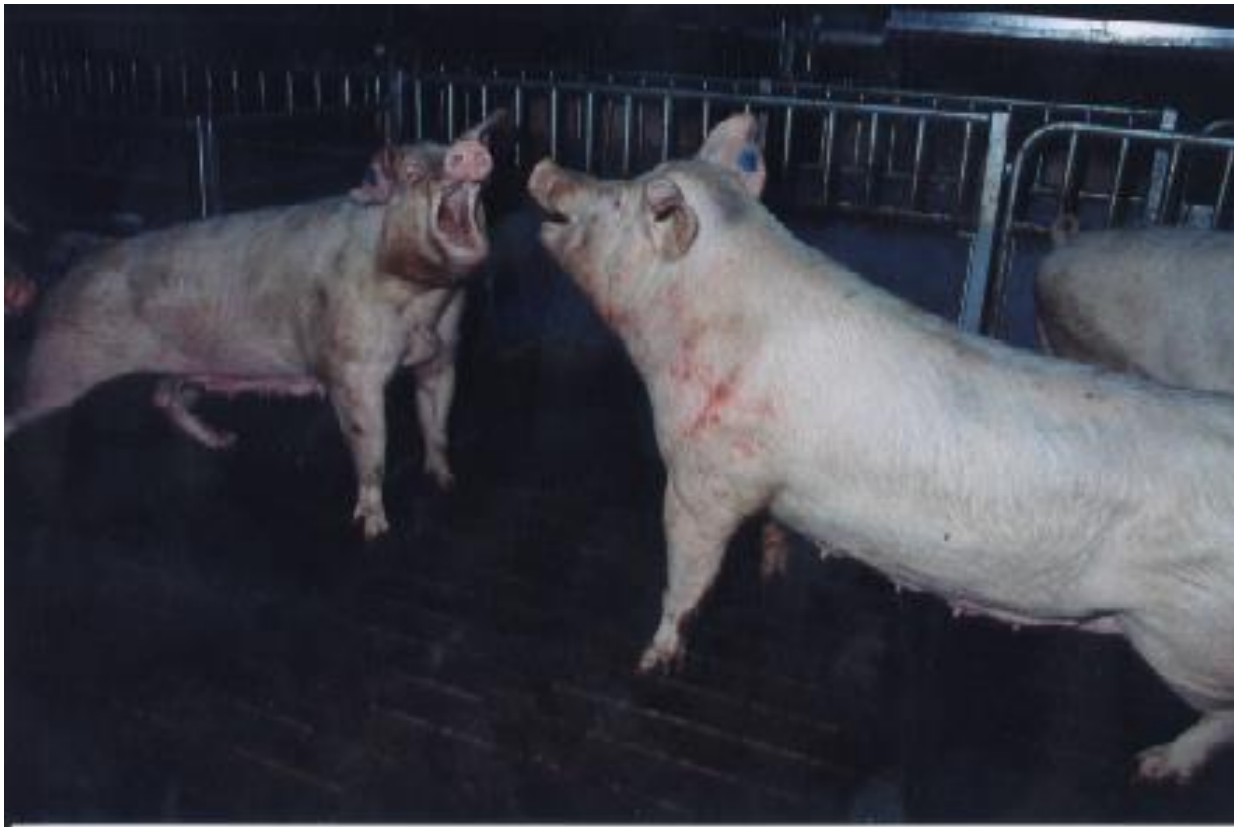
- ESF feeder design
- Walk ways
- Sufficient drinkers
(12-15 sows / drinker; always have 2 in pen)
- Sufficient feeders
(one each, or 1 EFS for 40-50 sows max?)
- Avoid undesirable lying space (draught...)



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Minimising (effects of) rank order fights

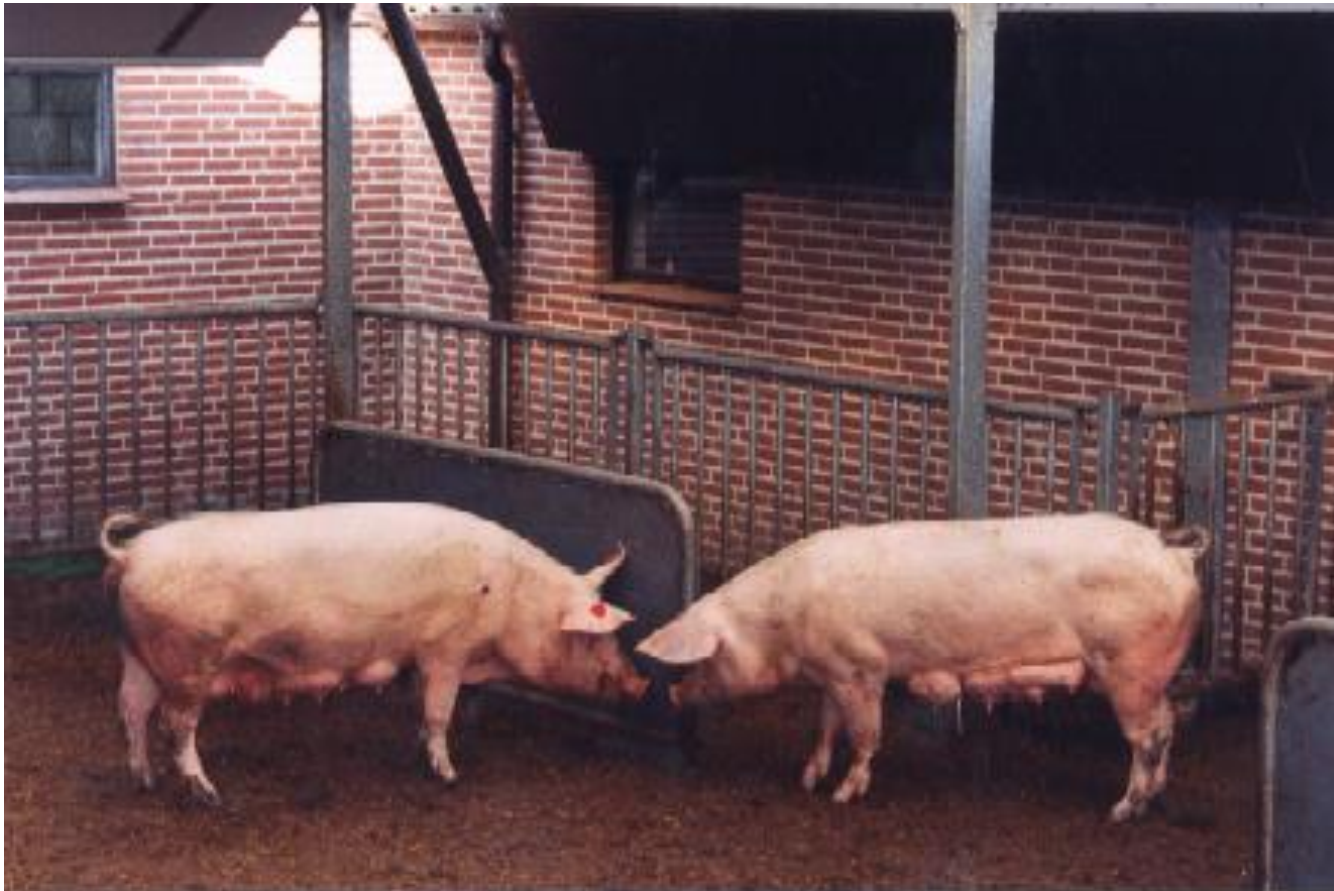
Slatted floors and lack of space cause problems



Space during the first hours after mixing



Familiar sows recognise each other



The proximity of a boar reduces unrest



Does straw reduce aggression?

- No
- But: better grip for claws
 - Reduced embryonic mortality
 - Thermal comfort
 - Reduces stereotypies...





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Focus on gilts

'Train' gilts

- Social skills
- How to use the feeding system



Within days a stable group has formed



“That’s all very well, but doesn’t work in practice!”

In The Netherlands:

- Group housing of sows from 4 days after service
- -> sows during ‘critical phase’ in groups!
- More returns to service?



Housing system & sow reproductive performance

- Nearly 900 farms in telephone survey
- 80% answered questions regarding
 - Sow group housing system (wide range)
 - Timing of introduction to the group (4 days – 4 weeks)
 - Returns to service



Housing system & sow reproductive performance

- Nearly 900 farms in telephone survey
- 80% answered questions regarding
 - Sow group housing system (wide range)
 - Timing of introduction to the group (4 days – 4 weeks)
 - Returns to service
- Average pregnancy rate: 87%, range: 70-96%
 - No effect of housing system
 - No effect of timing of introduction!



Housing system & sow reproductive performance

- Visits to 70 farms (group housing from day 4)

Group housing system	Stable	Dynamic	Total
ESF no straw	7	27	34
ESF with straw	0	20	20
Free access stalls	3	3	6
Long trough wet feeding	7	0	7
Ad lib feeding	2	0	2
Floor feeding	1	0	1
Total	20	50	70

- >150 questions were asked





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Performance (2007-2008)

	Average	Minimum	Maximum
farrowing%	85,9	77,2	93,0
farrowing% cycle 1	87,3	73,7	95,9
Weaned piglets/sow/y	25,2	22,1	28,1
% replacement cycle 1 sows	5,2	0,8	16,6
% replacement cycle 2 sows	10,2	1,9	21,7

Conclusion 1

- Group housing in (early) pregnancy can be successful
- But advisors often blame group housing during periods of bad results



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Conclusion 2

- Huge variation in all collected data
 - Animal characteristics (condition/backfat, skin lesions)
 - Farmer characteristics
 - Farm equipment
 - Farm management
- This means that there is room for improvement!

Conclusion 3

- System of group housing is not the most important factor
- Each system can produce good and bad results
- Important is
 - Attitude
 - Motivation

Quotes of the best pig farmers:

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



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Conclusion 4: Success factors

- Management
- Gilt rearing
- Space during pregnancy

Management

- Working in a structured way
- Working accurate
- Change when necessary
- Record data
- Feeding based on animal condition
- Inspection of ESFeeders
- Use attention lists in ESF



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Effect of management on results

	25 % worst	25 % best
Farrowing rate	< 83,3 %	> 89,0 %
% of management points	50 %	76 %



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Success factor 2

- Gilt rearing
 - Sufficient physical development
 - Getting used to feeding system
 - Space to develop social skills

Space per gilt

	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



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Nutrition rearing gilts and getting used to the feeding station

	25 % worst	25 % best
Farrowing rate	< 83,3 %	> 89,0 %
Limited feeding vs. unlimited feeding*	60	94
Dry feed vs. liquid feed *	73	100
Used to the feeding station yes vs. no*	69	94

* Percentage of the farms

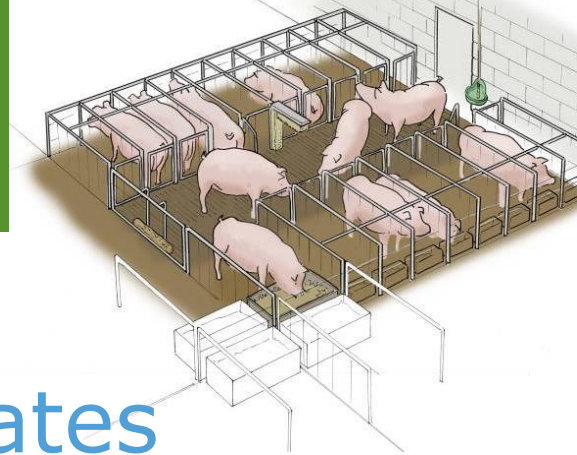


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Success factor 3

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



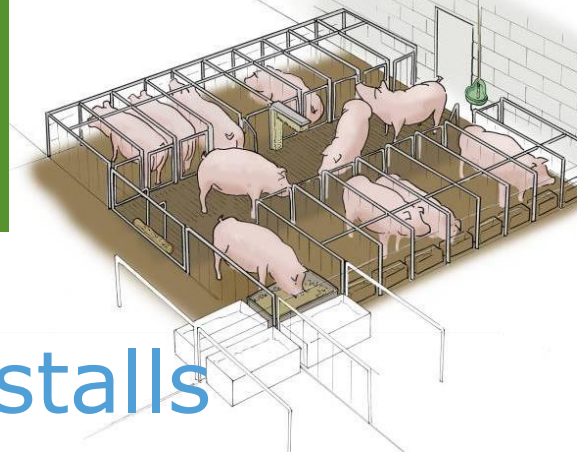
Free housing with feeding crates

- Lock the sows up for 30-60 minutes during feeding time
 - Higher farrowing rate
 - Less claw problems

- Floor between stalls 3 m wide
 - Higher farrowing rate
 - Less culled
 - Better sow condition at farrowing



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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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★ EURCAW Pigs
★ European Reference Centre
★ for Animal Welfare



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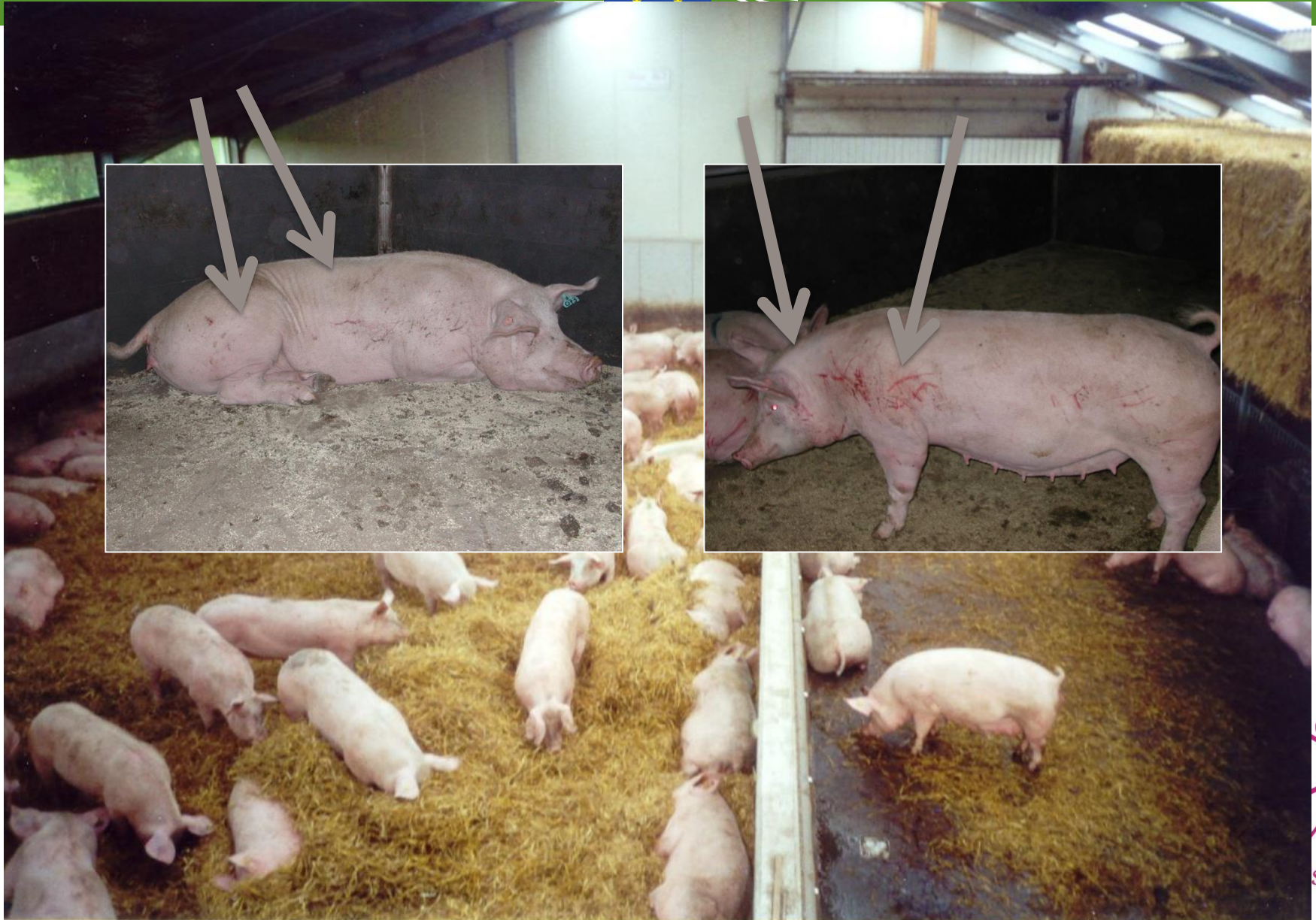
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Understanding pigs

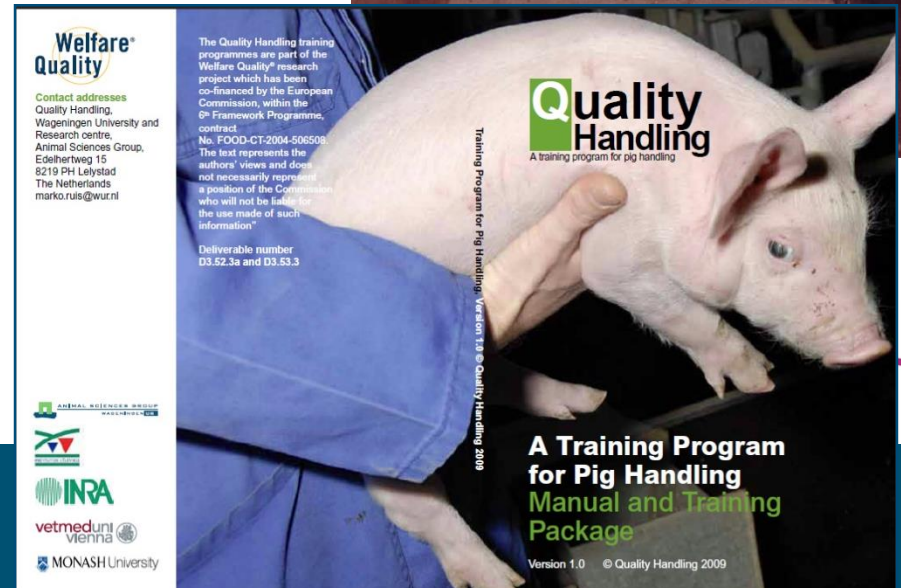




**PIG
SIGNALS**

A PIG, A PONY AND A LOT

Jeff Huxford
Karen Schonberger



Strategies to improve sow welfare

- Housing is important, but management will make the difference for welfare
- Good management requires the right attitude, and personal involvement in new developments
- To operate high welfare systems, you need to understand the animals
- ...and to understand what they are saying, you need to observe them!

