Critical Pigs Welfare Issues

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Introduction

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  • „BEP Bioschwein“
Overview

What is pig welfare and how to measure it?
Normal pig behaviour – welfare indicators
Critical issues & solutions
  • Social behaviour
  • Feeding behaviour
  • ‘Thermoregulation
  • Locomotory behaviour

Housing and management
  • Pregant and lactating sows
  • Weaners/growers
  • Finishers

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How is her welfare?
2 concepts

Physical

Mental

Early tumors
Early infections

Fear
Pain

Clinical disease
Injury

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Example of issues affecting physical / mental welfare and naturalness

• Physical
  – Development of shoulder sores
  – Urinary tract infections
  – Mastitis

• Mental
  – Pain from shoulder sores
  – Lack of coping?

• Naturalness - Restriction of
  – Nestbuilding behaviour
  – Mother-child behaviour
  – Defecation
  – Lying behaviour

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How to measure animal welfare?

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Pigs are social animals

- Both Wild Boars and feral pigs are social animals
- herds formed by long-time associations between mothers and their female offspring
- most common group sizes 2-6 individuals

Social structure

• Normally stable social groups
• New animal introduced into group

Fighting: head to head

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Lesions from Fighting

Sign. Correlation between fighting observed and lesions (Barnett et al., 1996)

– Two parallel scratches
– Head, neck, shoulder
– Healing quickly
Fight lesions and management of groups

Median number of injuries/sow of herd

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Leeb et al., 2001

N = 27 Stable group  N = 28 Dynamic group

Leeb et al., 2001
Stable groups

- Farrowing group 1
- Farrowing group 2
- Service area
- Pregnant sows
Feeding Behaviour

- All pigs eat at the same time
- Exploratory/foraging behaviour up to 75% of daily activity
- Rooting, grazing, browsing
  (Stolba and Wood-Gush, 1989).

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Feeding behaviour – implications for SOWS

Different stages of pregnancy – different needs

Restricted food for pregnant sows

Eating simultaneously

- Protect the sow during eating!!
- Provide enough feeding places
- Feed individually/group wise according to condition

Long time spent eating

- feeding twice daily and
- bulky/high fibre food

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Legislation

• 4. (6) Sows and gilts kept in groups must be fed using a system which ensures that each individual can obtain sufficient food even when competitors for the food are present;

• (7) To satisfy their hunger and given the need to chew, all dry pregnant sows and gilts must be given a sufficient quantity of bulky or high-fibre food as well as high-energy food;
Roughage for sows

Constant hunger in sows
Stereotypies
Problems related to feeding

Inadequate feeding design

– No feeding of individuals possible – too thin/fat
– Vulvabiting

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Vulva lesions in relation to design of feeding area

Sows:

**Tethering** banned from January 1\(^{st}\), 2006 on

**Individual stalls** will be prohibited from 4 weeks after parturition and 7 days before the following parturition
  - Ban for all new buildings from January 1st, 2003 on
  - for all buildings from January 1st, 2013 on
Group Housing for sows

- (4) (a) ... in groups during a period starting from 4 weeks after the service to 1 week before the expected time of farrowing.
- The pen where the group is kept must have sides > 2.8 m in length.
- < 6 individuals are kept in a group the pen where the group is kept must have sides greater than 2.4 m in length;
- (b) the total area at least 2.25 m² respectively.
- < 6 individuals increased by 10 %.
- > 40 individuals the decreased by 10 %;

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Three Area PEN

- Lying/Resting Area (1m²/sow)
- Dunging/Activity (1m²/sow)
- Individual feeder (1m²/sow)
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Lying Area (1m²/sow)
Individual feeder (1m²/sow)
Dunging/Activity (1m²/sow)

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2 Area – combined lying/dunging

Individual feeder (55cm wide)

Lying/Dunging

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2 Area – combined lying/dunging
Electronic sow feeding (ESF)

Feeding station

Dunging/Activity (1-2 m²/sow)

Lying Area (1m²/sow)

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How to adapt to group housing?
250 sows individually housed
Crate: 0.58m x 2.15m = 1.25m²/sow

132 sows (3.5m²/sow)  66 sows (7m²/sow)

Total: 41m x 14.7m = 610m²
Requirements: EU: 2.25m²/sow, Organic: 2.5m² + 1.9m² outside

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Farrowing sows - Legislation

3. In the week before the expected farrowing time sows and gilts must be given suitable nesting material in sufficient quantity …

4. An unobstructed area behind the sow or gilt must be available for the ease of natural or assisted farrowing.
Free Farrowing

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Discussion on parameters for sows

• Which parameters do you use already?
• Which parameters would you like to use?