



**INDUSTRY INITIATIVES TO IMPROVE THE REARING OF PIGS AND PHASING OUT TAIL DOCKING**

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**Dan Avl**

**SEGES**  
Svineproduktion

**Three main research question**

*What is the consequences of a cessation of tail docking on tail biting in well-managed Danish conventional herds?*

*Can behavioural changes before a tail biting outbreak be recognized by the farmer?*

*Can an early intervention reduce the level of tail lesions?*

**Tail biting: Early Recognition & Targeted Prevention**

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**DANISH PIG RESEARCH CENTRE**  
(DANISH AGRICULTURAL & FOOD COUNCIL)


- Financed by Danish pig farmers
- Main task: **Research and demonstration programmes** for the Danish pig producer
- Support the **development of a responsible and economically sustainable pig industry** with the **highest possible level of welfare** and a **minimum impact on the environment**
- **Non-commercial trials** for 15 million Euro annually
- Operate on **200 commercial farms**



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**BEST PRACTICE GUIDELINES**



**Best practice hands out**  
- Danish, English and Russian

[www.vsp.lf.dk](http://www.vsp.lf.dk)


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**WELFARE SUMMIT, 2014**

- Called by *Minister of Food, Agriculture and Fisheries*
- Signed declaration
  - Government
  - Industry
  - Animal rights organizations
  - Retailers
- Reduction in the number of tail docked piglets

Declaration



5 30-12-2016

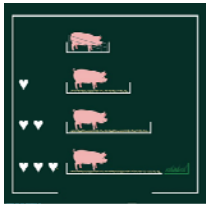
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**PUBLIC ANIMAL WELFARE LABEL**

First pigs will be slaughtered in 2017

- Housing
  - Loose sows
  - Intact tails
  - Straw

Three levels (principle!)



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# Danish legislation



## TAIL DOCKING IN DENMARK

- Majority of pigs are tail docked
  - Only half the tail must be docked



## DANISH LEGISLATION – ENRICHMENT

Distinguish between rooting material and manipulating material..!

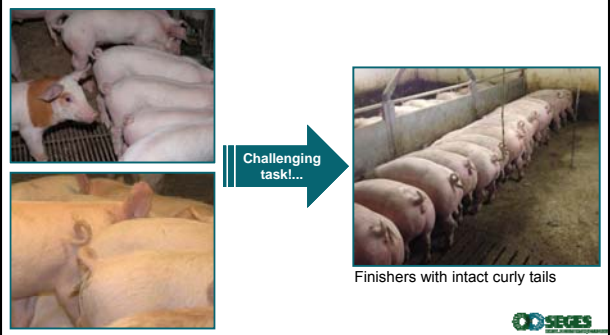
### Rooting & manipulating material



### Rooting material



### Manipulating material



## RESEARCH ACTIVITIES - PRC

- Intact tails on commercial farms
  - Docked and undocked pigs
  - Development of automatic warning system
    - Activity, temperature and water consumption
- Swedish versus Danish pens
  - Housing systems
- Social skills
  - Breeding for social skills to prevent tail biting
- PhD project
  - Tail biting: Early recognition and targeted prevention
- Experiences from work with farmers



## REVIEW: INJURIOUS TAIL BITING - HOW CAN IT BE CONTROLLED?

- Aim
  - How well are different risk factors investigated?
  - How farmers can become better at controlling tail biting without docking?
- Method
  - Includes only studies where tail damage is recorded
  - Does not include studies describing non-injurious tail chewing

(D'Eath et al. 2014, Animal)



### FACTORS AFFECTING DAMAGING TAIL BITING

Risk factor	Good evidence (research based)	Epidemiological evidence	Unclear evidence/ little effect	More research is needed
Enrichment	✓			
Feeder space	✓			
Temperature		✓		
Season		✓		
Stocking density			✓	
Group size			✓	
Nutrition				✓
Disease				✓
Breed				✓

(D'Eath et al. 2014)

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No tail docking in indoor well-managed herds

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### INTACT TAILS IN LOW RISK FARMS

- Three herds with very low incidence of tail biting among tail docked pigs
  - Two herds: compared tail docked v undocked
- 75 - 160 pigs with intact tails (3-8 pens) in each batch
- Pigs were ear tagged → Individually tail scoring
  - Tail damages were recorded every second week

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### INTACT TAILS - 3 HERDS

More space from 7- 30 kg  
Herd 1  
Same pen from 7 – 110 kg



Traditional DK housing systems  
Herd 2  
Weaners



Herd 3  
Weaners



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### ENRICHMENT

#### BASIC



#### TAIL BITING – Farmers choice!



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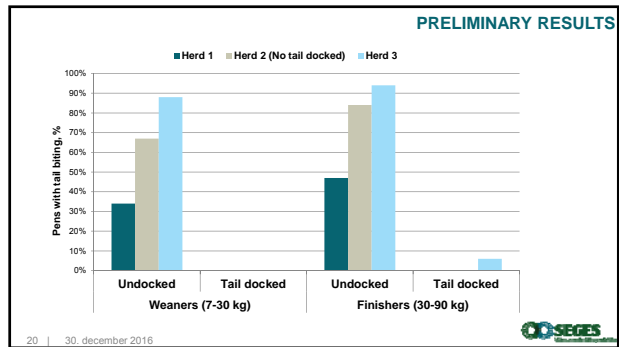
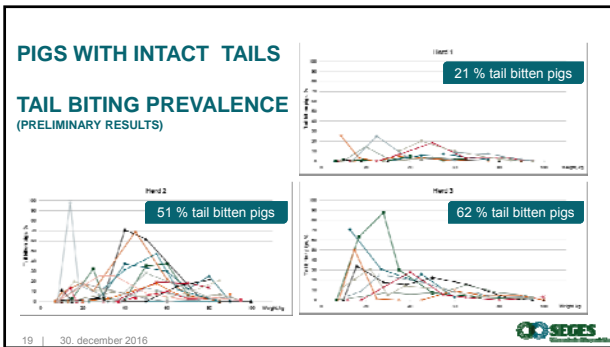


### TAIL DAMAGES



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### WHAT TO DO..?

- Enrichment material works – unless an aggressive biter...!

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### EVALUATE THE INTERVENTION

Day after detected outbreak

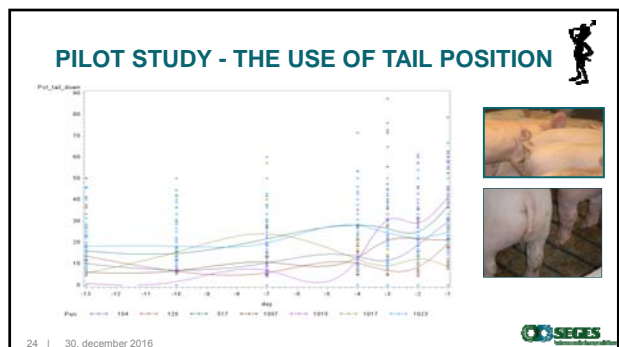
- Wounds with scab (black tail ends) → Tail biting has stopped
- Fresh wounds or bleeding tails → Tail biting is still going on
  - Increased focus to detect biter..!
  - New kind of material..
  - Remove bitten pigs..
  - DO SOMETHING..!

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### DETECT TAIL BITING OUTBREAKS EARLY

- Behavioural study prior to a tail biting outbreak (Video study)
- Weaners (7 - 30 kg) with 30-33 pigs/ pen
- 3 weekly tail scorings
  - Tail biting outbreak = 4 pigs had a tail damage

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### MORE TO IT, THAN TAIL POSITION!




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### THE SWEDISH WAY OR THE DANISH WAY?



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### TWO PEN DESIGNS IN ONE HERD



**Danish**


- 15 pigs per pen
- 0.77 m<sup>2</sup> per pig
- 0.25 m<sup>2</sup> solid floor per pig
- **Straw rack**



**Swedish**

- 12 pigs per pen
- 0.9 m<sup>2</sup> per pig
- 0.6 m<sup>2</sup> solid floor per pig
- **Straw on the floor**

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### THE COST OF INTACT TAILS

- More enrichment materials
- More time consuming
- More hospital pens
- Probably more space?
- Increased risk of tail biting remarks at slaughter




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### SUMMARY

- Industry initiatives
  - Continue our activities with intact tails → reduce number of tail docked pigs
    - Huge challenge...!
- Preliminary conclusion
  - Human factor
    - Skills...!
    - New management routines!
    - Farmers quote: "Is it better animal welfare to raise pigs with intact tails compared to tail docked, when so many pigs get tail bitten?"
  - A premium is needed for farmers raising pigs with intact tails
    - Market driven animal welfare



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