Impact of litter size in first parity on sow lifetime performance and health Emma Andersson, PhD student Dept. of Animal Environment and Health Swedish University of Agricultural Sciences



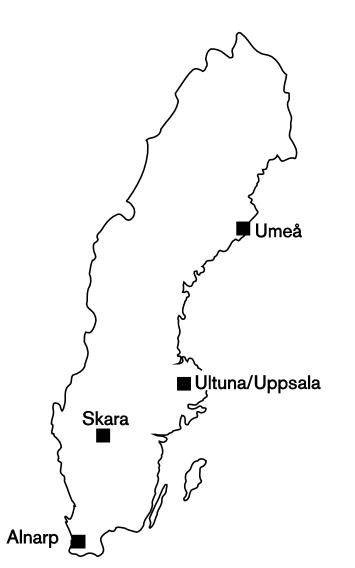
## Sow longevity

Length of productive lifetime

Lifetime performance



## Swedish piglet production



- 8% of the agricultural production 2015
- Approx. 420 herds (>50 sows)
- 145 000 sows

- Loose housed sows
- Large amount of straw
- Lactation min. 4w



Sweden	1994	2015	
Produced piglets/sow/year	19,0	25,1	
Litters/sow/year	2,1	2,2	
Liveborn piglets/litter	10,9	13,7	
Piglets dead birth - weaning	15,1%	17,5%	
Litters/sow when culled	4,9	4,3 (2009)	



## Objective



## Material



## Study population

#### Lifetime performance

Landrace x Yorkshire

• 24 herds

• 48 707 sows

#### **Health**

Yorkshire

• 1 herd

• 939 sows



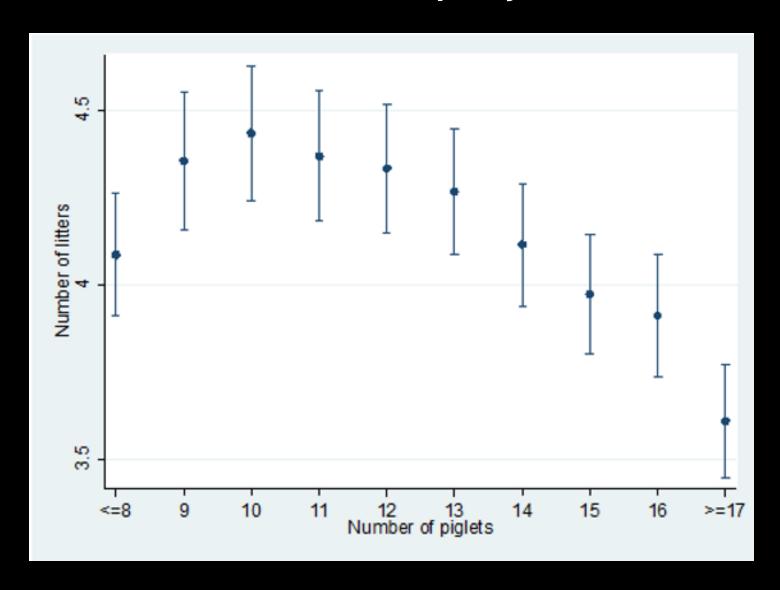
## Method



Results - lifetime performance

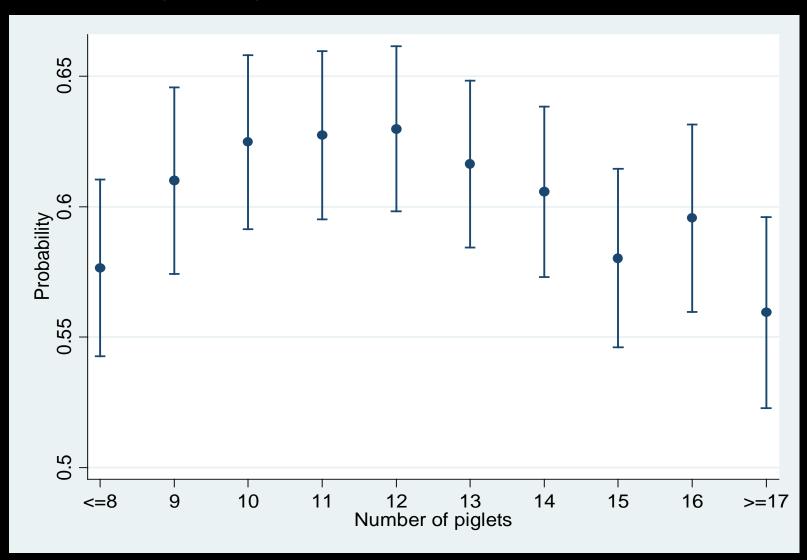


# Predicted lifetime production of litters and litter size in first parity





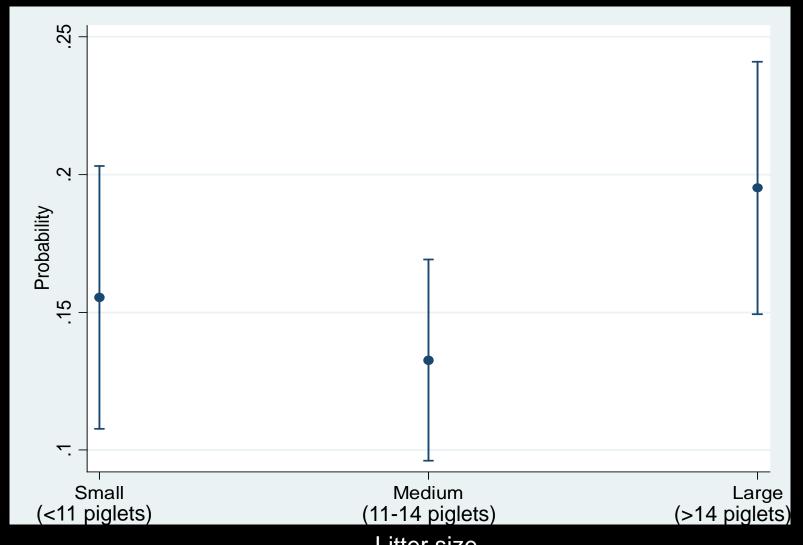
#### Predicted stayability (≥4 litters) and litter size in first parity





## Results - health

### SLU Predicted probability to receive medical treatment during gestation and lactation and litter size in first parity



Litter size



## Discussion



Important to take first parity litter size into account when assessing sow productivity in commercial piglet producing herds



Aiming for keeping sows giving birth to a medium-sized litter, with approximately 11-14 piglets born in total, may improve sows lifetime production, stayability and health



Further evaluation of impact of litter size on sow lifetime performance and health is needed



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Thank you for your attention!