



# ***The reindeer herders are interested in selective breeding***

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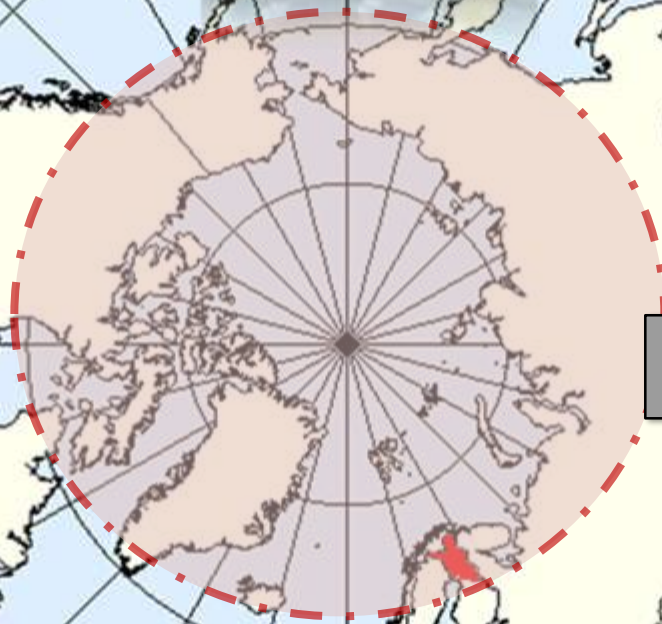
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Caribou

Reindeer





# Reindeer production in Finland

- 203 700 animals (quota)
  - limited pastures
- semi-domesticated animal
- meat production



# Reindeer production in Finland

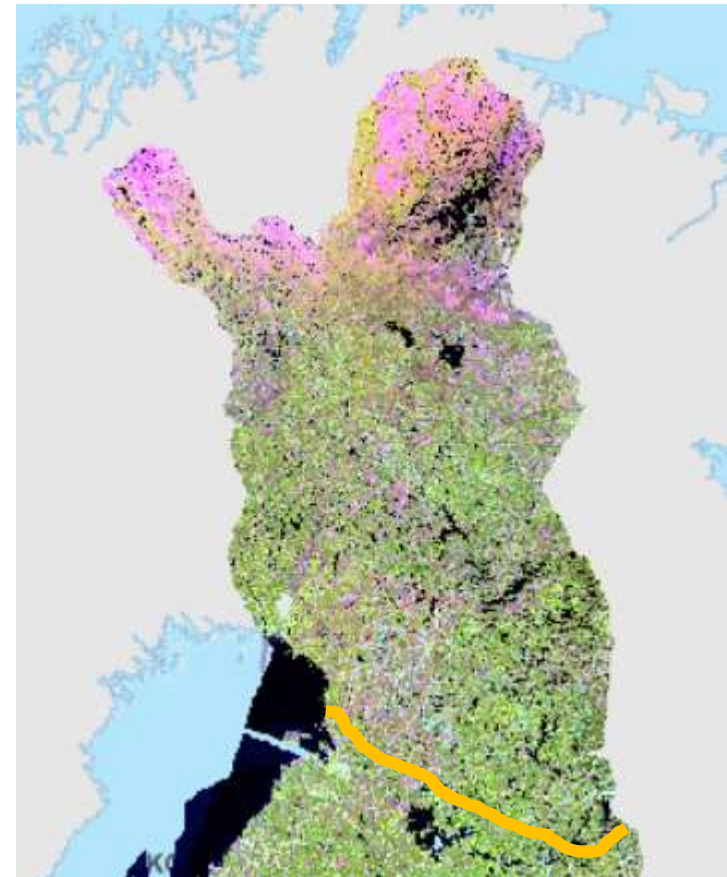
- Selection decisions made by herders
  - No ID, no records, no pedigree
  - Based on phenotype (+ dam)
- $\approx 70\%$  of slaughtered animals are calves
- More efficient selection?



# OBJECTIVES

Vast & variable reindeer herding area –  
importance and variation  
in selection decisions  
across the area?

- ▶ *Interviews of the herders*



# MATERIALS AND METHODS

## 1. Interviews

The managers of the co-operatives (N=56)

- covers all the herding area in Finland
- phone interviews, semi-structured
- 45 interviews (response rate **80.4 %**)



## 2. Official statistics

on reindeer demography

*Analyses in R (Kruskal-Wallis)*



Photo: Maija Mölläri

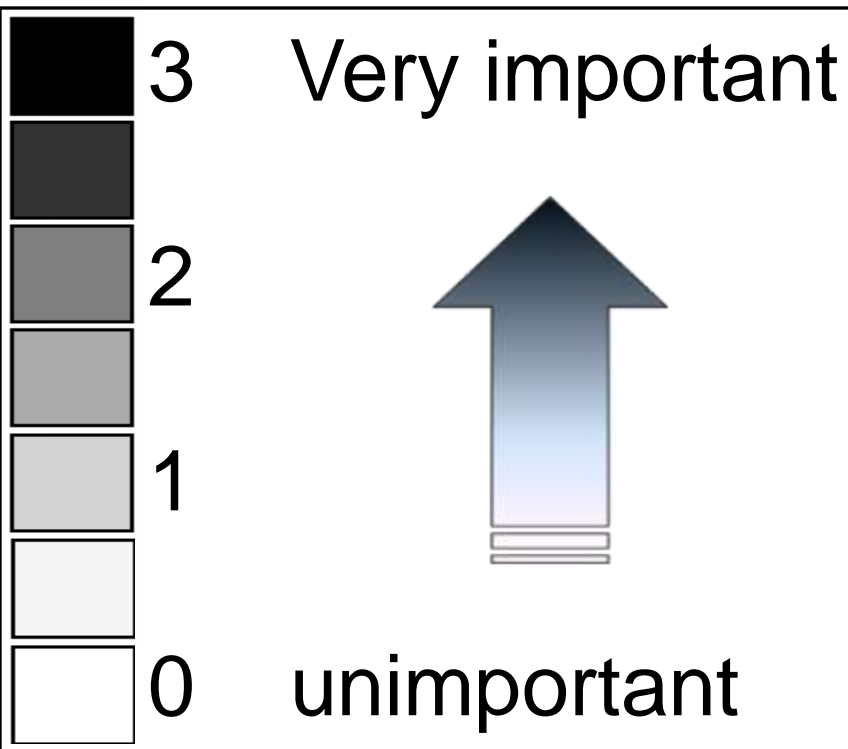
# RESULTS

## 1) Selection is important





# Division of the regions



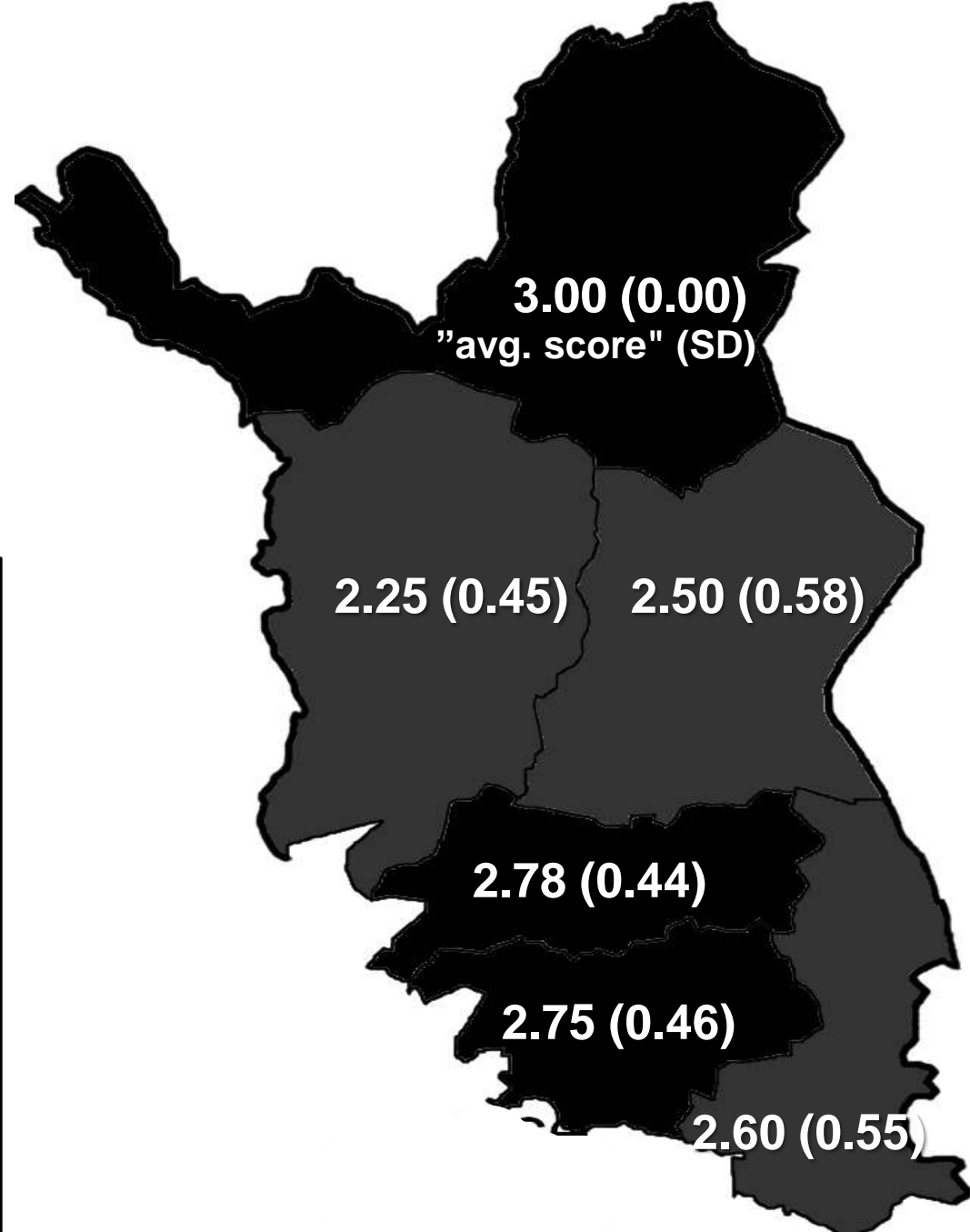
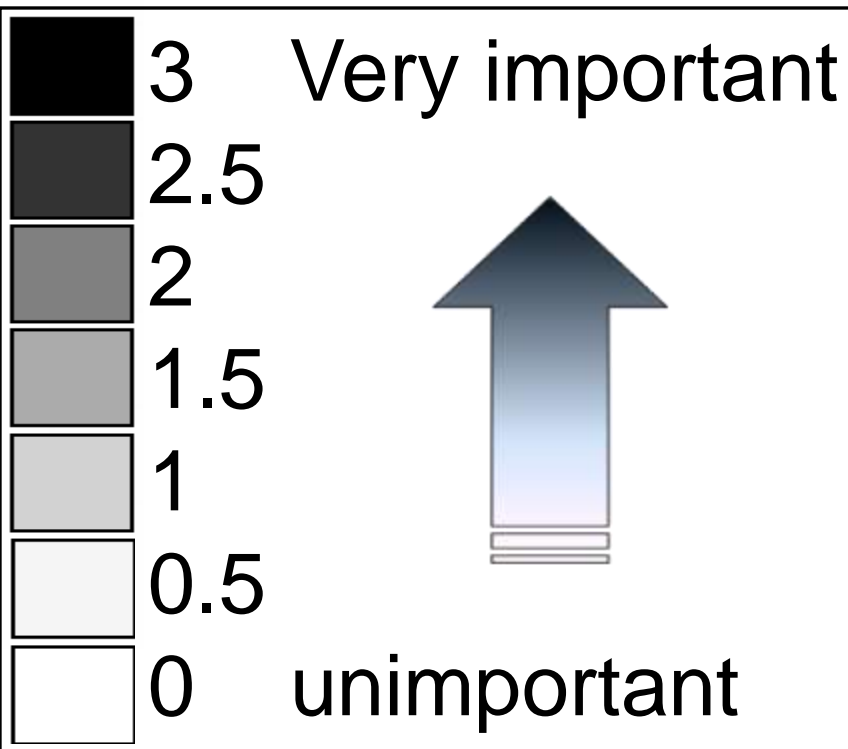
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Materials & Methods

Results

Conclusions

Selection is important in all regions



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# RESULTS

- 1) Selection is important
- 2) Selection criteria are consistent



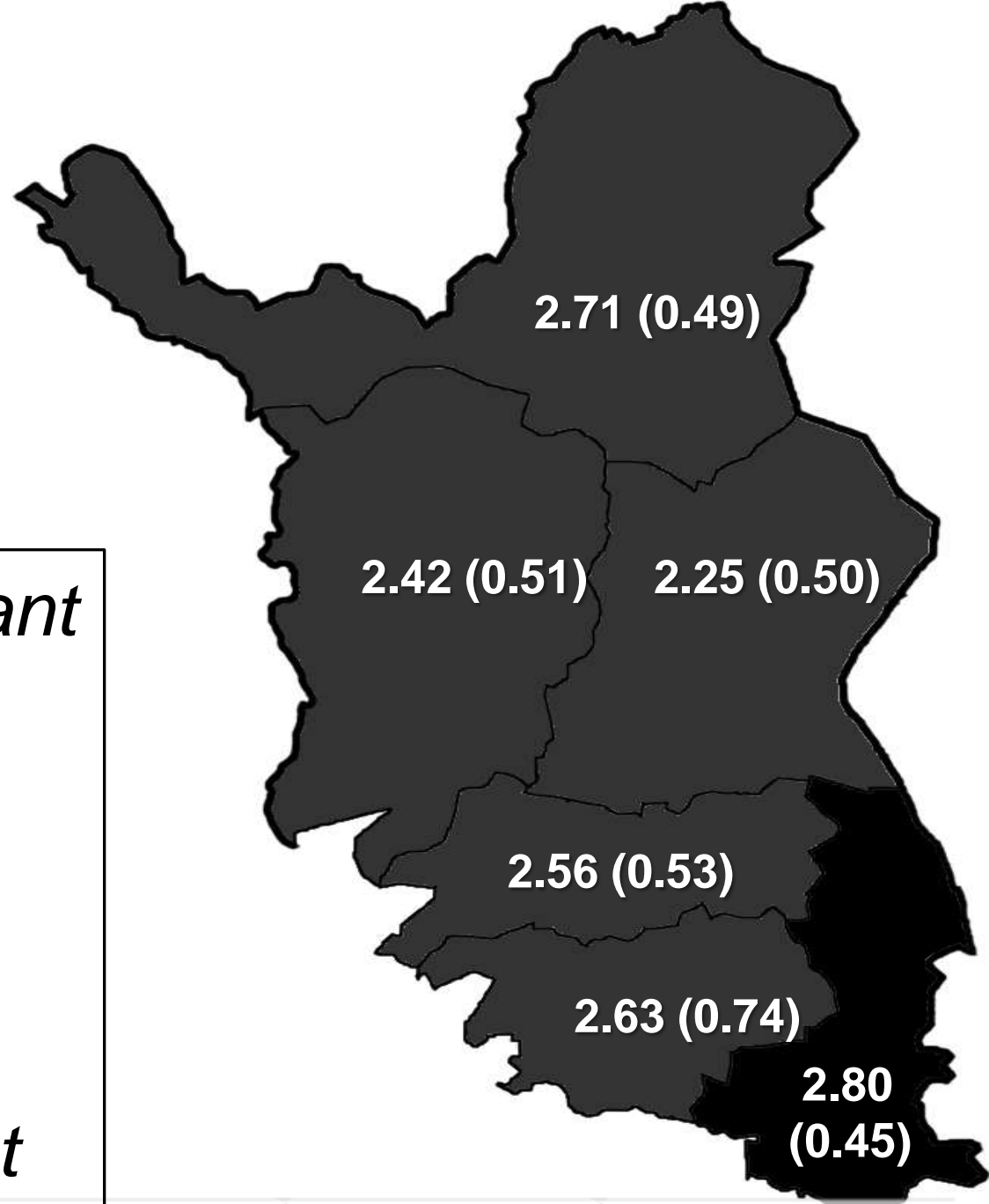
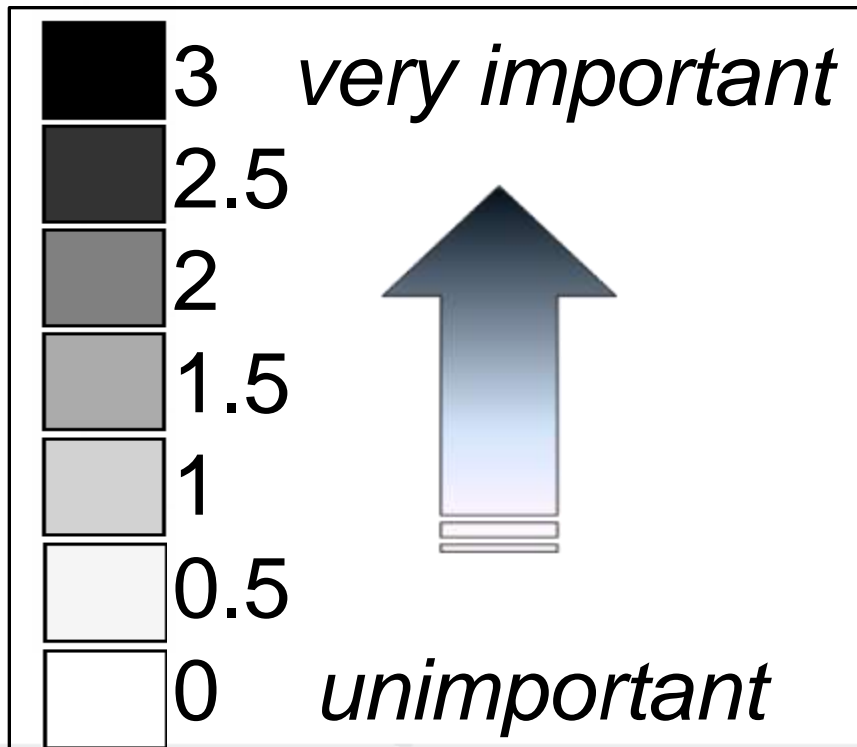
# The most important selection criteria

- Calf size and muscularity
- Dam or dam line + maternal care
- Quality of hair

**Main criteria are similar across the regions**



I Selection is consistent:  
***calf size***



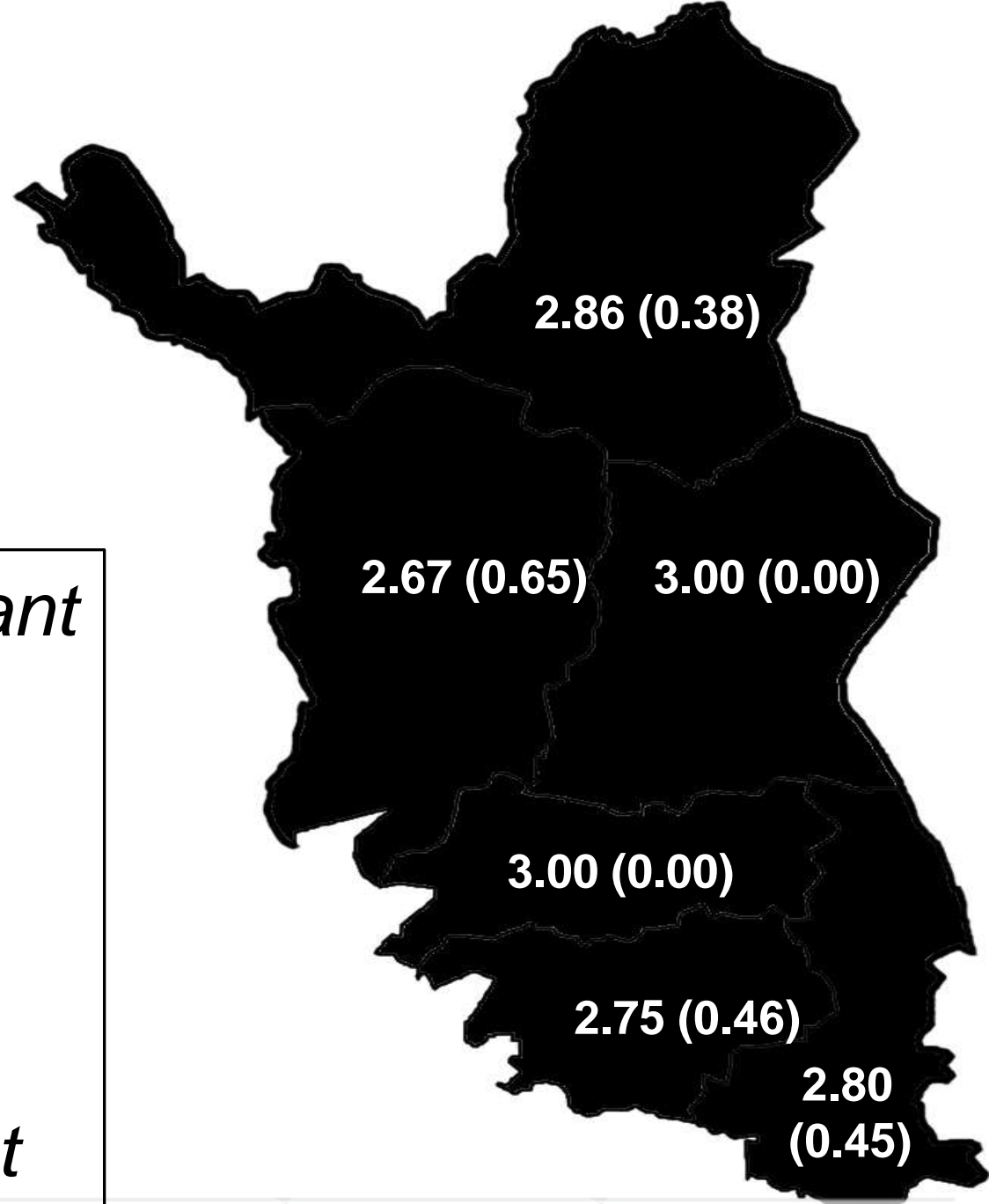
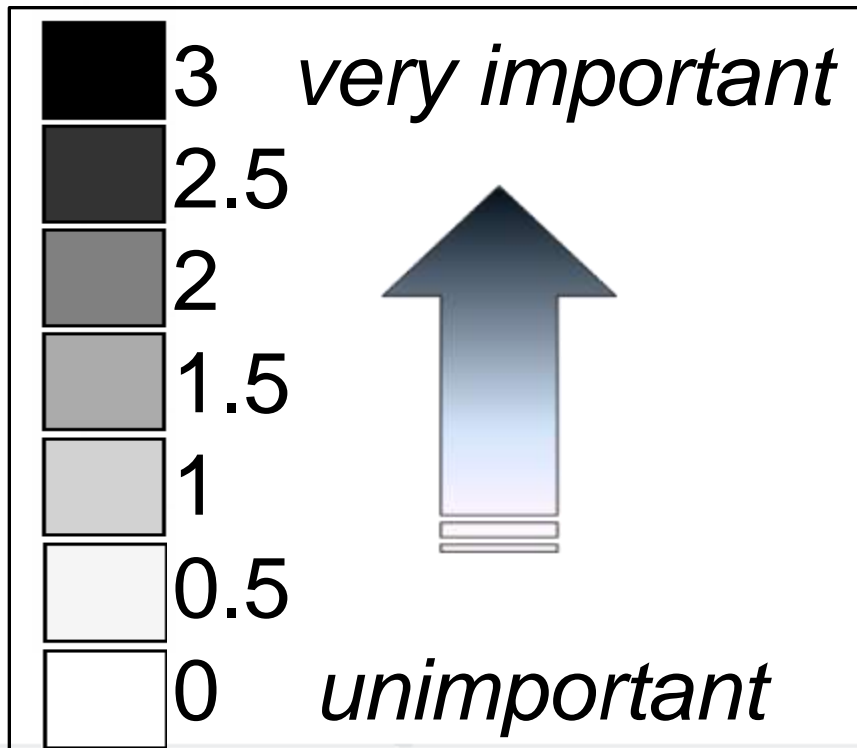
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# II Selection is consistent: *muscularity*



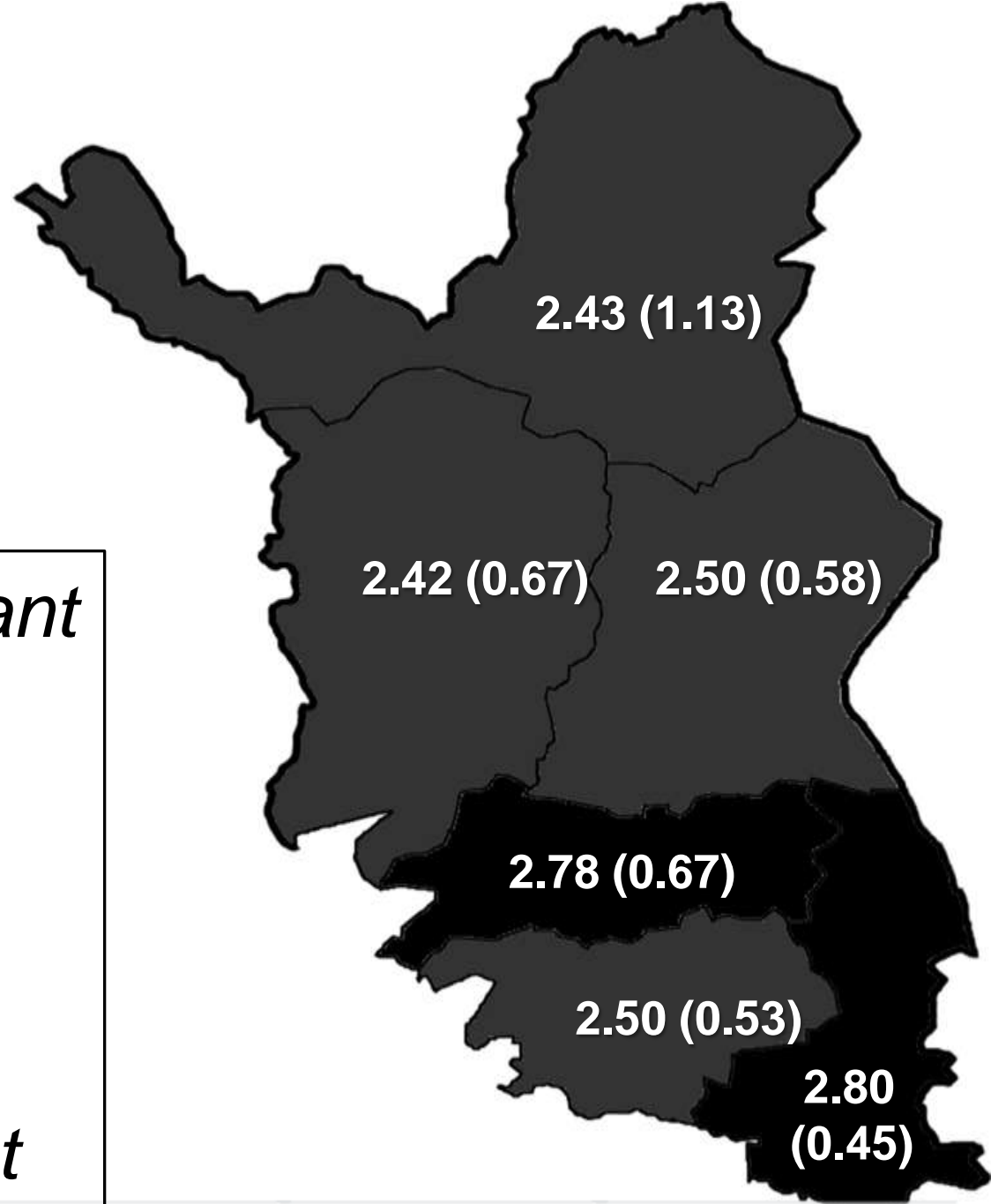
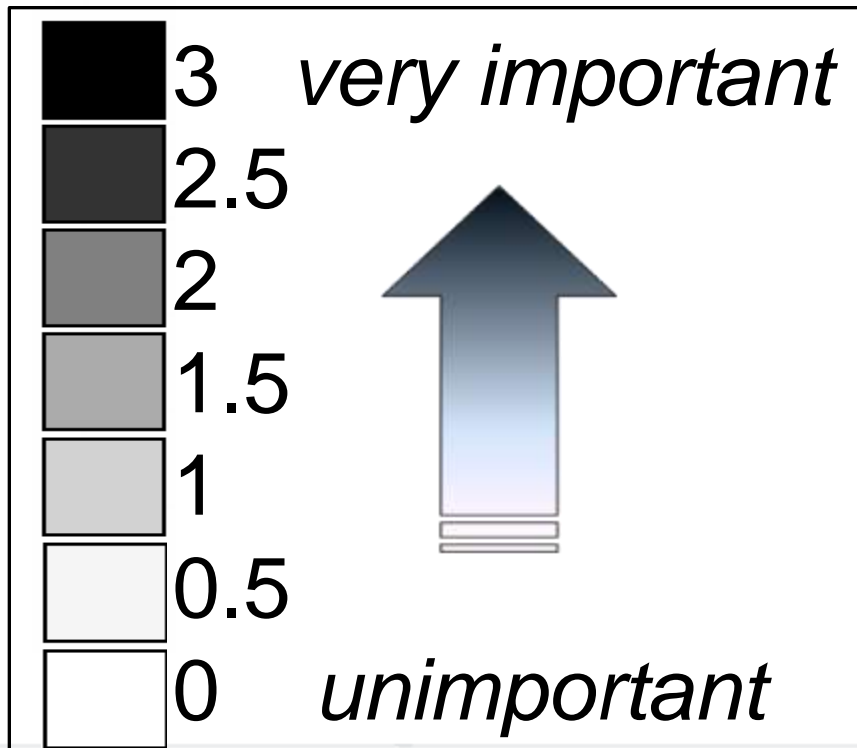
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# III Selection is consistent: *Importance of dam*



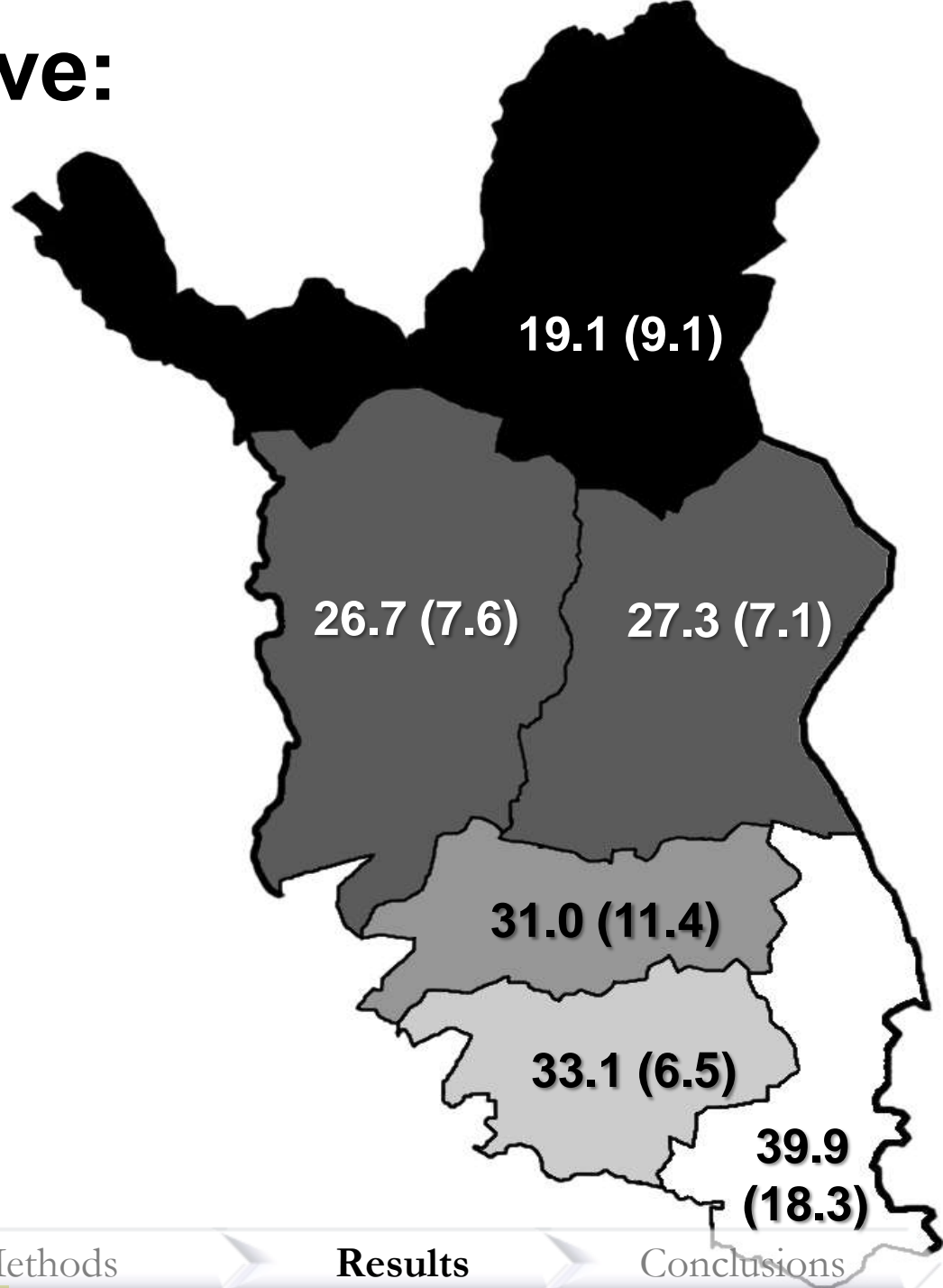
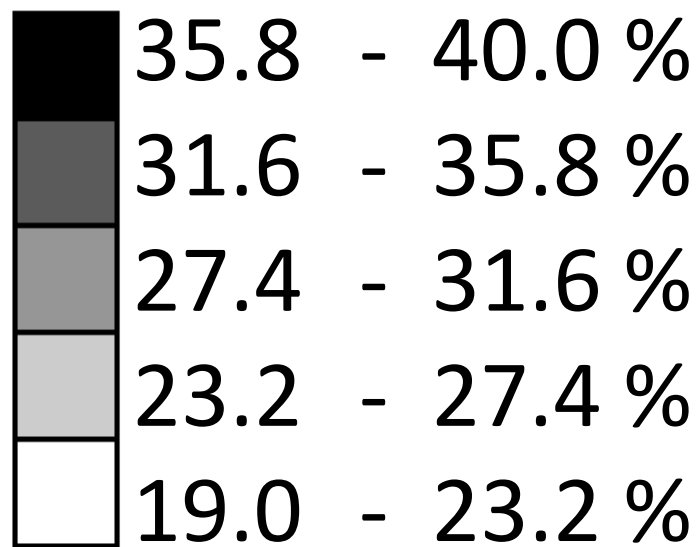
# RESULTS

- 1) Selection is **important**
- 2) Selection criteria are **consistent**
- 3) Selection is **intensive**





# Selection intensive: proportion of selected calves




# CONCLUSIONS

- Selection is important, consistent and intensive
- More efficient selection?
  - ➔ implementation of data collection:  
pedigree & weight recording
- The herders are interested in selective breeding -  
good basis for genetic improvement scheme!



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# THANK YOU FOR YOUR INTEREST!

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Photo: Veikko Maijala

The End!