63rd Annual Meeting EAAP 2012, Bratislava, August 27th – 31st, 2012
SESSION 43: Efficiency and optimization in ruminant husbandry

Photo: Markku Ylivaara

Photo:Veikko Maijala

The reindeer herders are interested in selective breeding

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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)

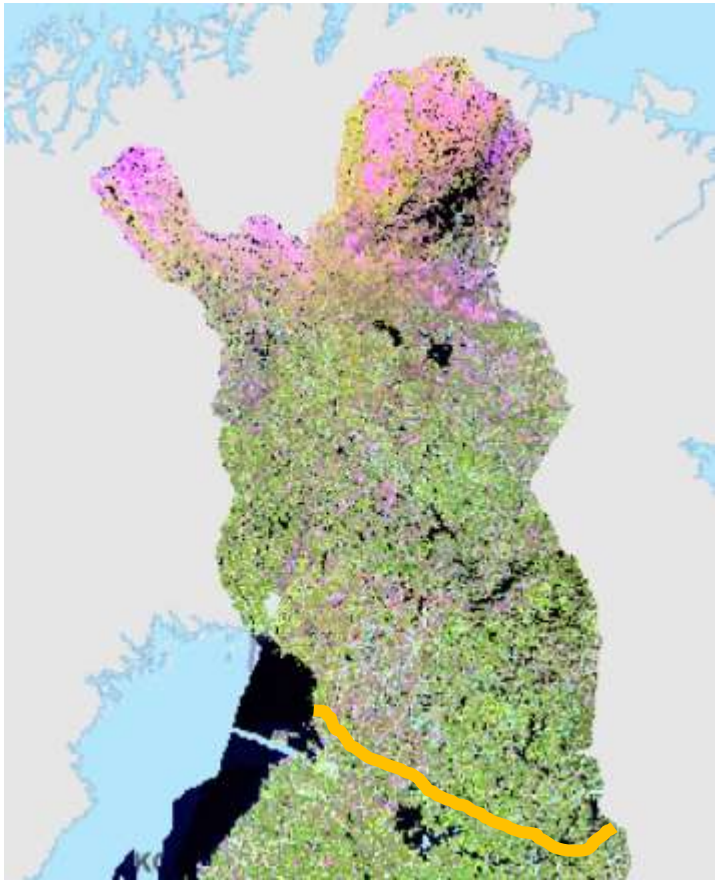
- ≈ 70 % of slaughtered animals are calves

- 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

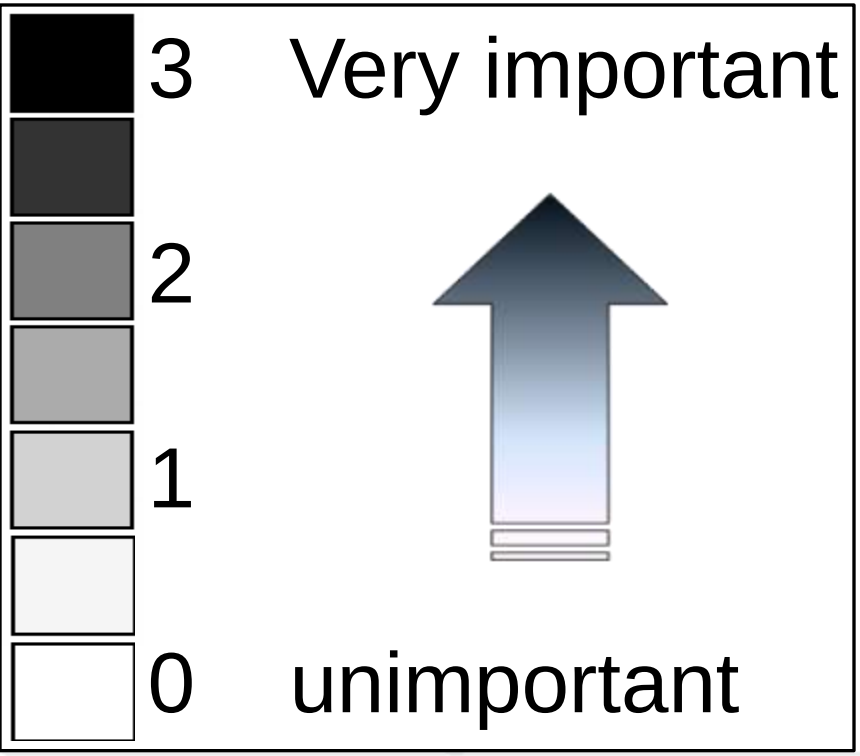
Analyses in R (Kruskal-Wallis)

Photo: Maija Mölläri

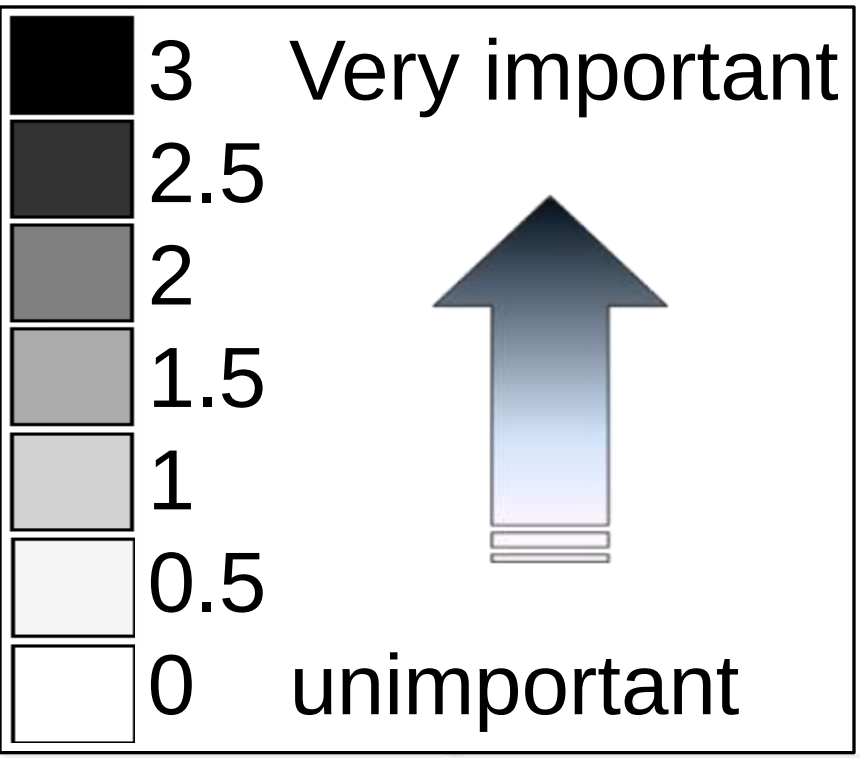
RESULTS

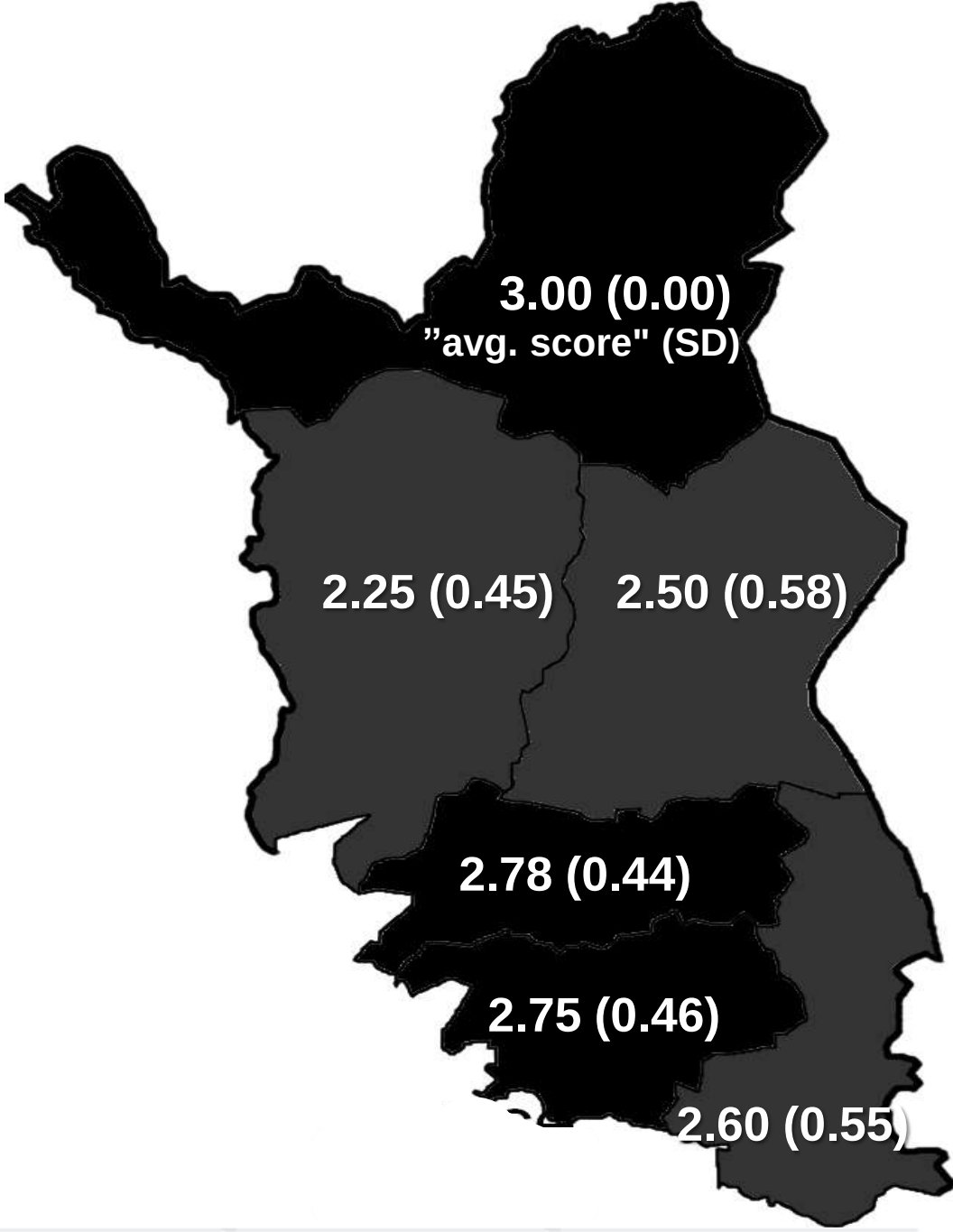
1) Selection is important

Division of the regions



Selection is important in all regions





RESULTS

1) Selection is **important**

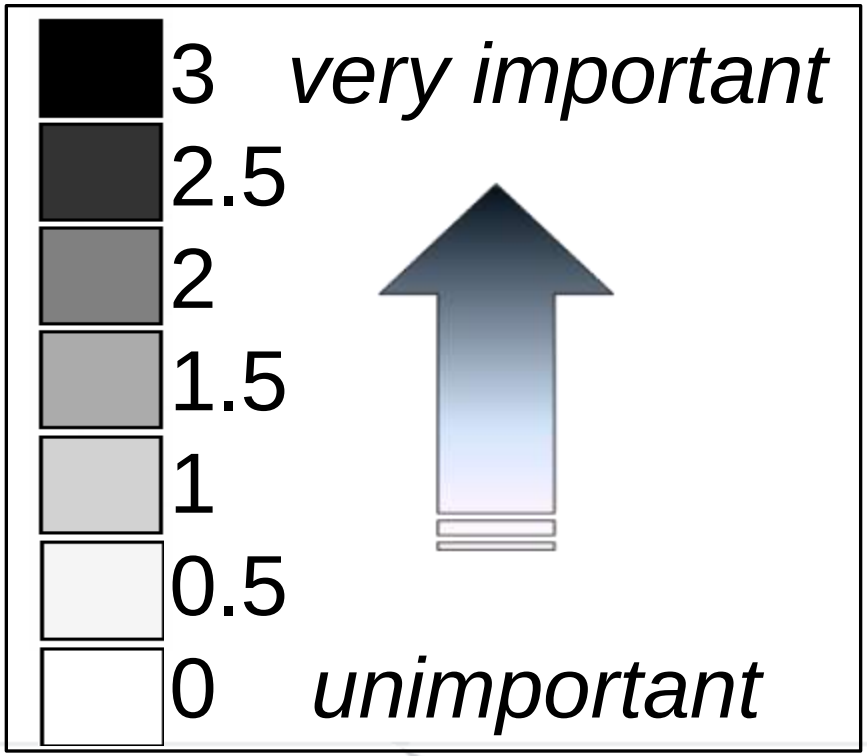
2) **Selection criteria are consistent**

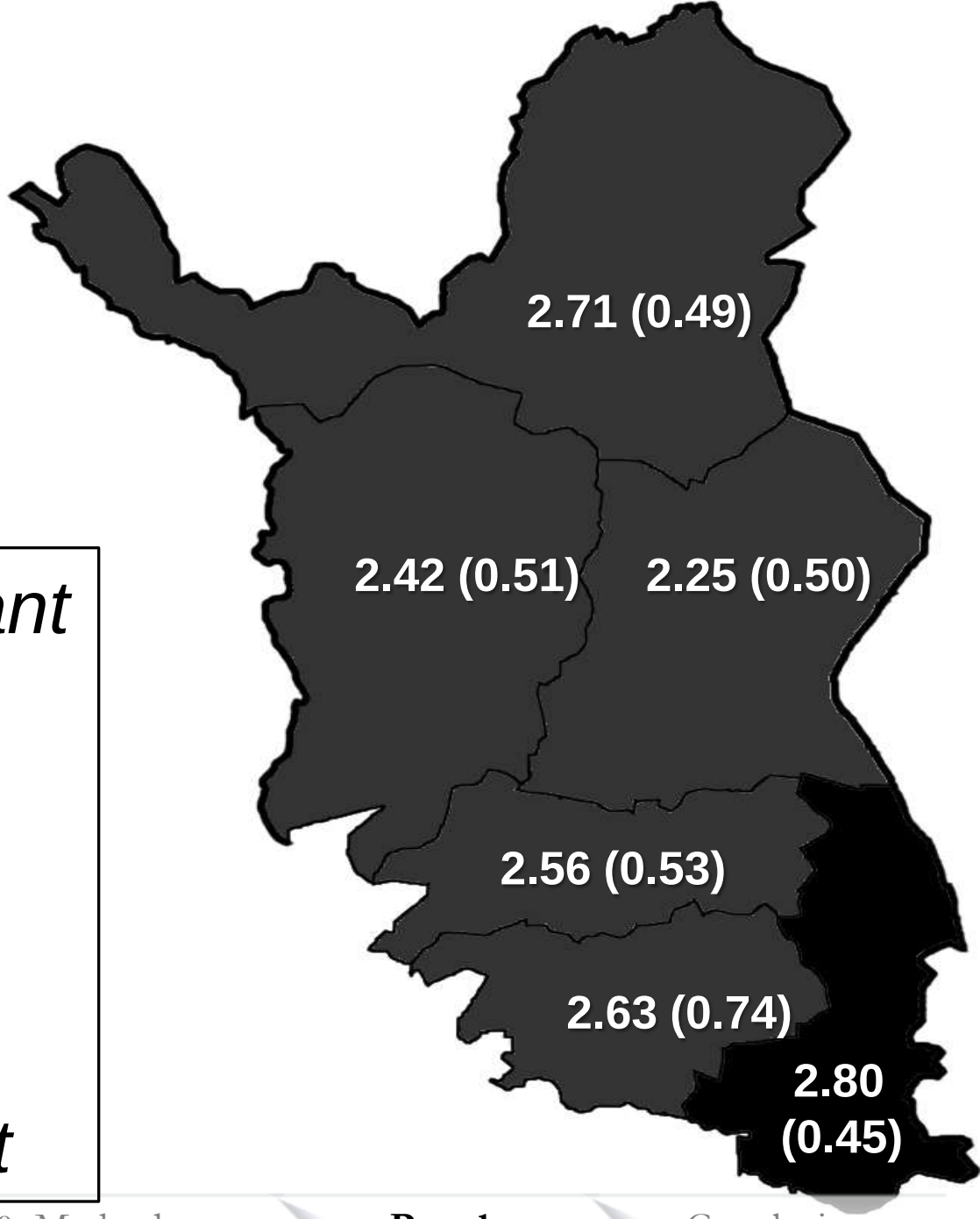
The most important selection criteria

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

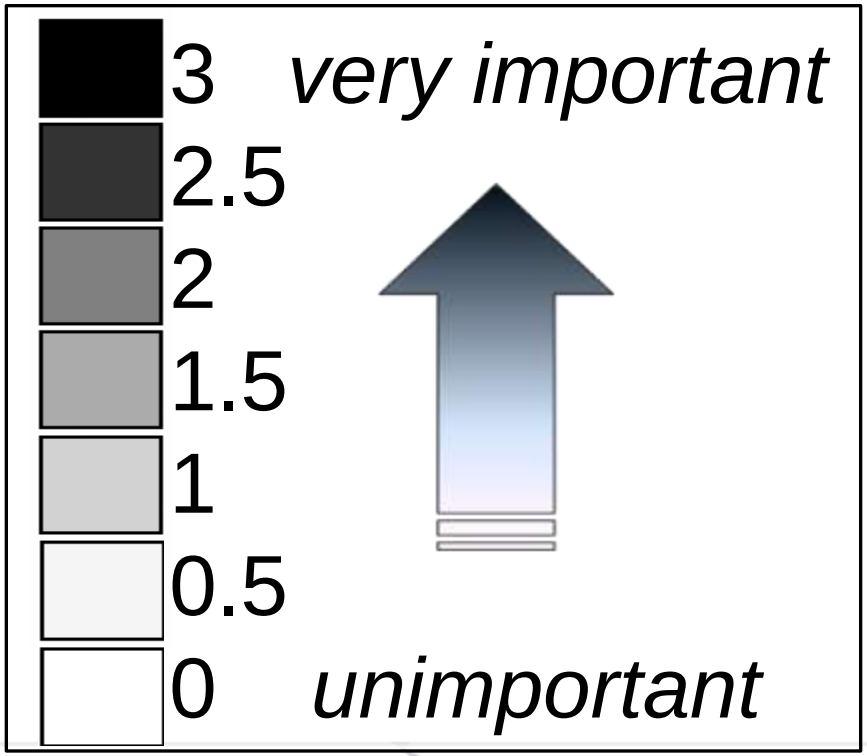
Main criteria are similar across the regions

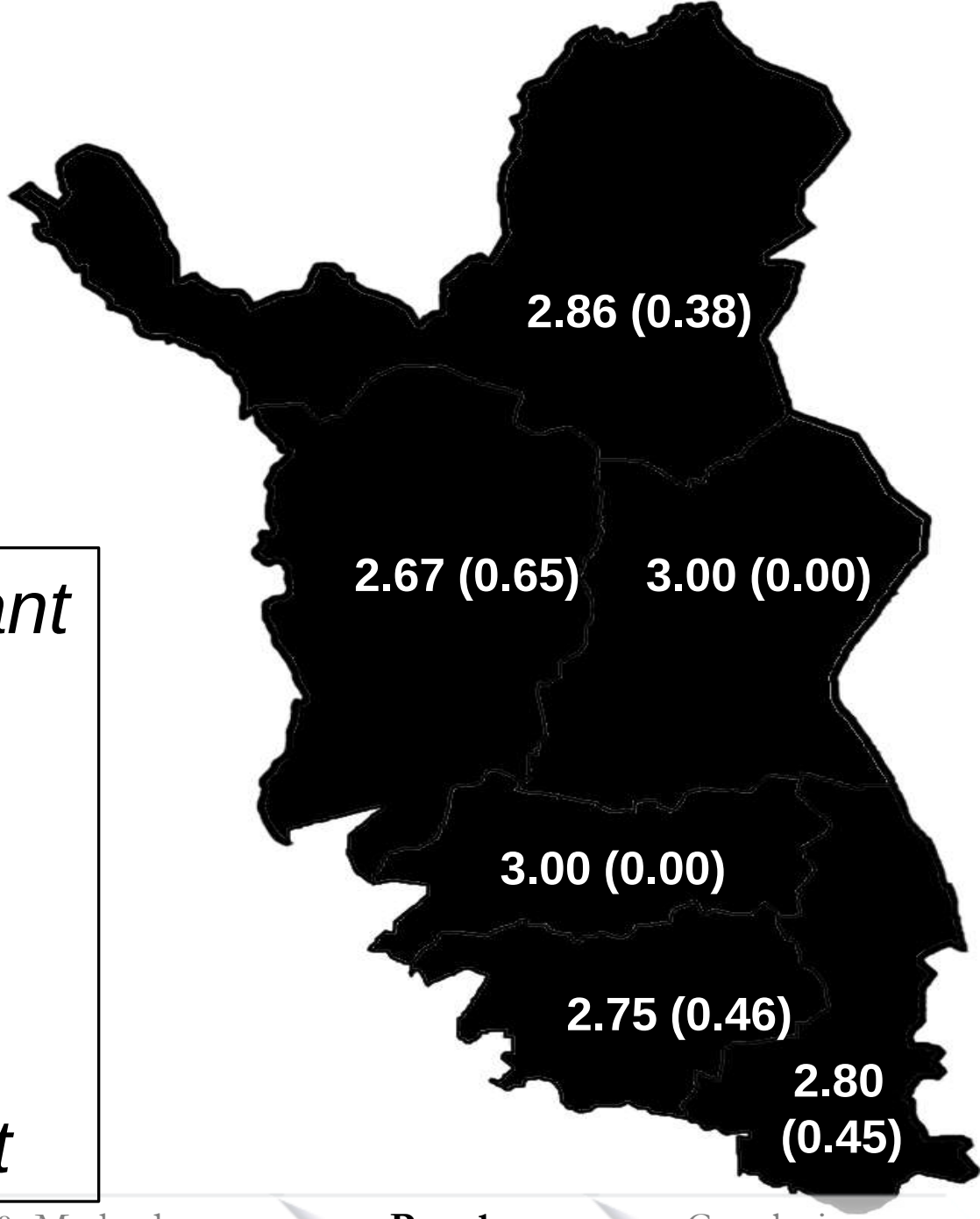
I Selection is consistent: ***calf size***



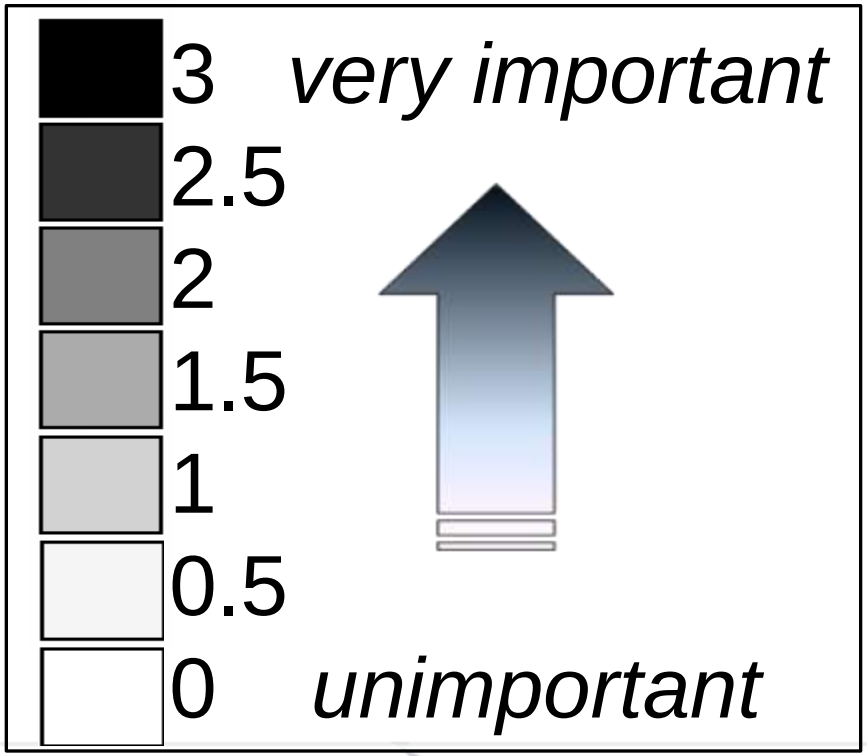


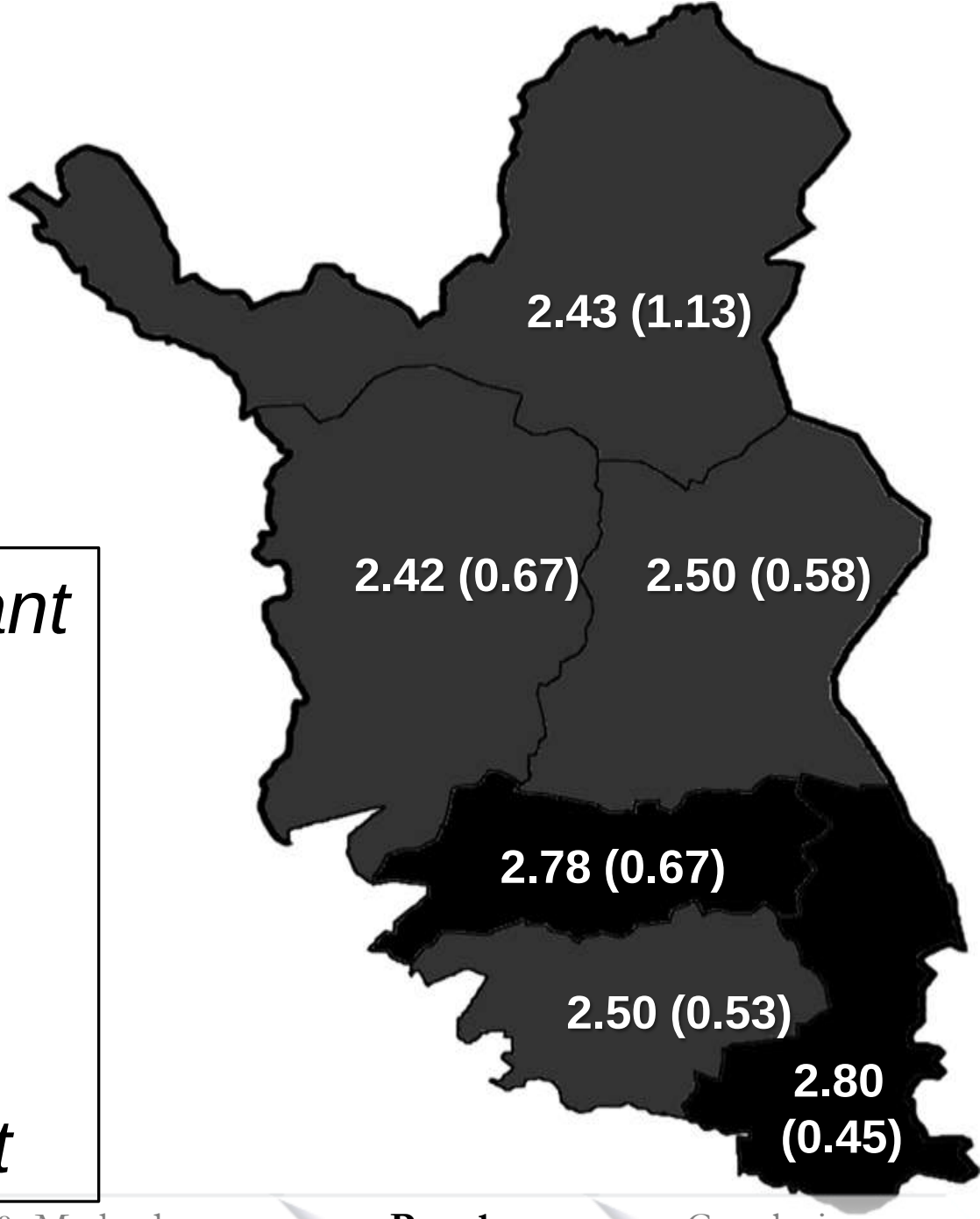
II Selection is consistent: ***muscularity***





III Selection is consistent: ***Importance of dam***



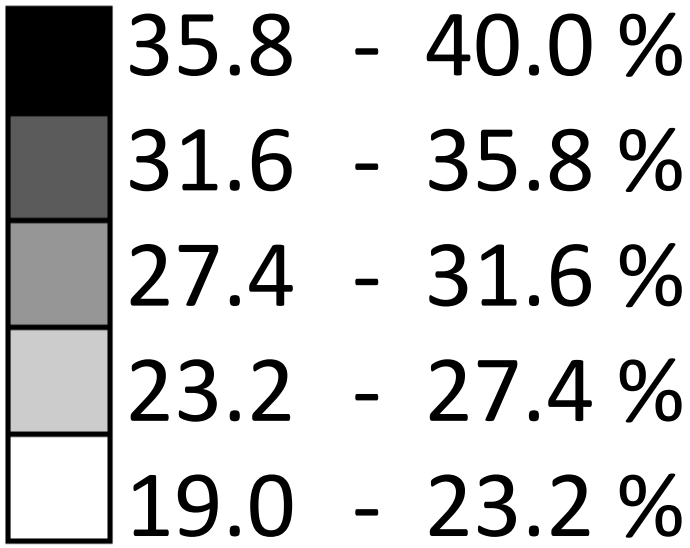


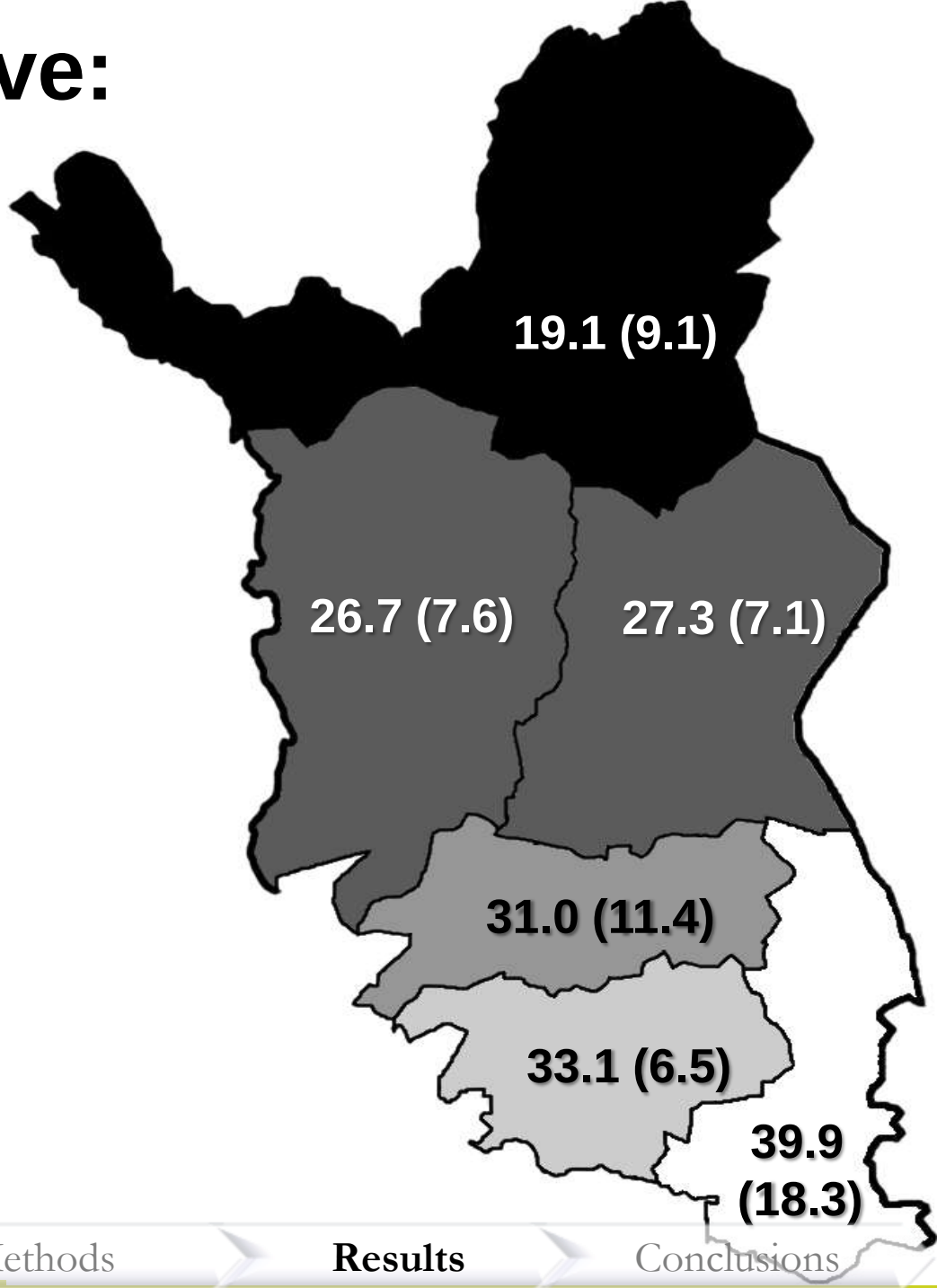
RESULTS

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!

Acknowledgements:

Reindeer herders and the managers of co-operatives

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THANK YOU FOR YOUR INTEREST!

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Photo: Veikko Maijala

The End!