Why don't cows live longer?
Herd factors affecting longevity

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Background

Breeding value for longevity

Average age at culling, months

Source: Jan-Åke Eriksson, Växa Sverige and statistics from Växa Sverige
Breakeven for replacement heifer

Average herd life 60.5

Source: Patrik Nordgren, Växa Sverige
Background

- Positive genetic trend in longevity
- Large economic benefits of increasing longevity
- Large potential: the 10\textsuperscript{th} percentile with lowest culling have 16\% culling rate, whereas average is 29\%.

So, why does longevity not increase?

Aim

Identify factors at the herd level important for short or long average length of life.
Material and method

- All individuals (females) born or calving from Sep 2004 to Aug 2011 from all herds with at least 20 cows 2010/2011
- “Case-control” study
  - ¼ of herds with shortest and ¼ of herds with longest average life;
    Low PL: 765 herds High PL: 638 herds
- Based both on total length of life (from birth, TL) and productive life (from first calving, PL)
- Calculated as average “age” of cows culled in the herd during 3 years at the end of data
- Logistic regression using high TL/PL vs low TL/PL as dependent variable
Data available

• Information on individual cows, e.g.,
  • Calving dates
  • Culling dates and reasons
  • Diseases
  • Lactation 305-d yield
  • Milk breeding values cow, sire and dam

• For the herd
  • Information about the production system, organic/conv, milking system, et cetera
  • Welfare indicators, 24 indicators summarized into 7 categories
    Calf health    Young stock health    Calvings
    Feeding problems  Diseases          Longevity
    Monitoring and management
Conclusions

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• High cow mortality and stillbirth a risk factor for short PL/TL
• Overemphasis on short CI or low SCC can give low PL/TL
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Thank you for listening

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