



KU LEUVEN

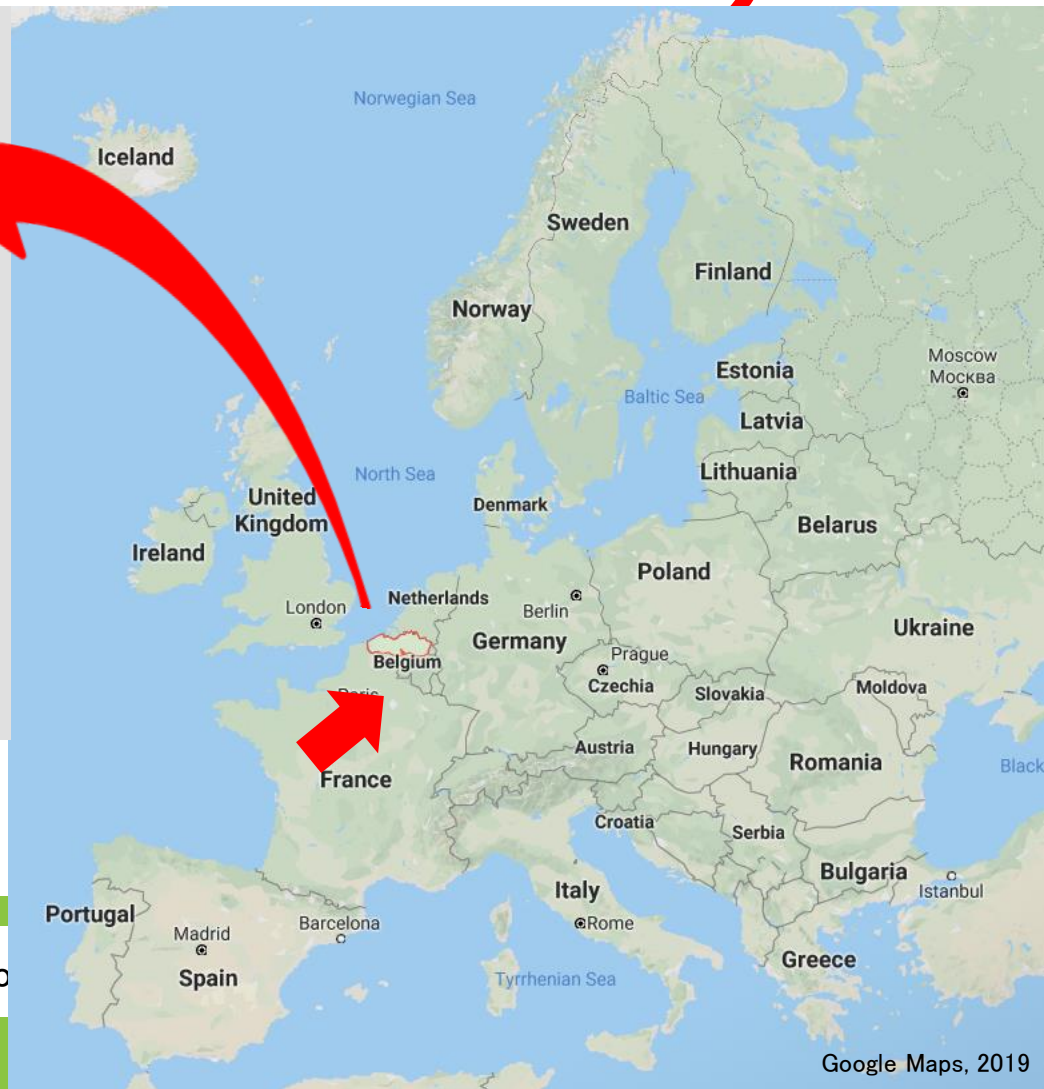
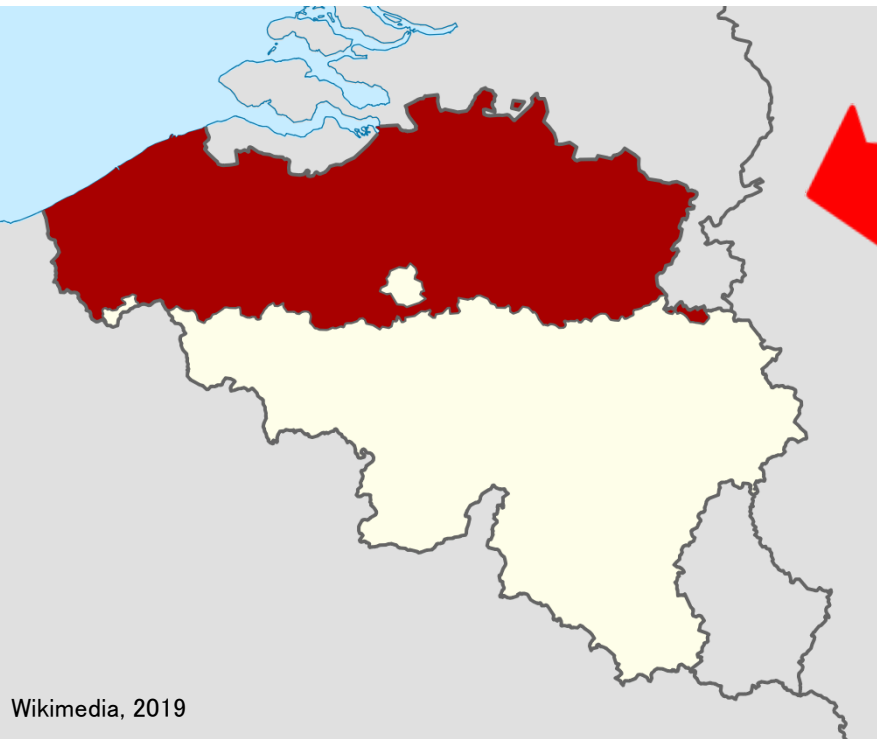
The relation between the prevalence of claw lesions in Flemish dairies and the perception of the farmers

Béke Nivelles, Sanne Van Beirendonck, Jos Van Thielen, Johan Buyse & Bert Driessen

beke.nivelles@dierenwelzijn.eu

FLANDERS?

- Dutch speaking part of Belgium



Wikimedia, 2019

Google Maps, 2019

FLANDERS?

- Dutch speaking part of Belgium
- In 2017:
 - 5,794 farms with dairy cattle^{...} (LARA, 2018)
 - ... of which 2756 are specialised in dairy cattle (LARA, 2018)
 - 309,605 lactating dairy cows (LARA, 2018)
 - 8864 kg milk/year/cow (LARA, 2018)



Sigrid van Dort

STUDY DESIGN

- Online survey
 - Management & housing practises
 - Estimated prevalence of most common claw lesions
 - Interdigital dermatitis (ID)
 - Digital dermatitis (DD)
 - White line disease (WLD)
 - Sole ulcer (SU)
 - Interdigital hyperplasia (IH)
 - Footrot (FR)
 - Sole haemorrhages (SoH)
 - (Swollen heels (SH))



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STUDY DESIGN

- Online survey
 - Management & housing practises
 - Estimated prevalence of most common claw lesions
 - No idea
 - 0%, absent
 - 1-5%
 - 5-10%
 - 10-20%
 - 20-30%
 - 30-40%
 - 40-50%
 - 50-60%
 - 60-80%
 - > 80%



STUDY DESIGN

- 40 dairies visited (17,6%) → cubicles & slatted floor
- 13–40 cows per dairy examined → total: 743



STUDY DESIGN

- Examination
 - Scores
 - mobility
 - hygiene
 - leg conformation
 - body condition
 - Hind feet
 - trimmed
 - lesions scored



STUDY DESIGN

- **Mobility**
(Sprecher et al., 1997)
 - 5-point score
 - > 2 = lame

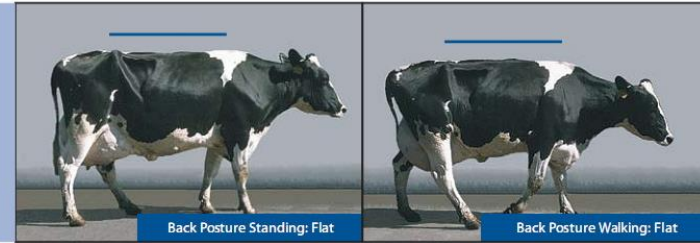
Locomotion Scoring of Dairy Cattle

LOCOMOTION SCORE 1

Clinical Description:

NORMAL

Description: Stands and walks normally with a level back. Makes long confident strides.



LOCOMOTION SCORE 2

Clinical Description:

MILDLY LAME

Description: Stands with flat back, but arches when walks. Gait is slightly abnormal.

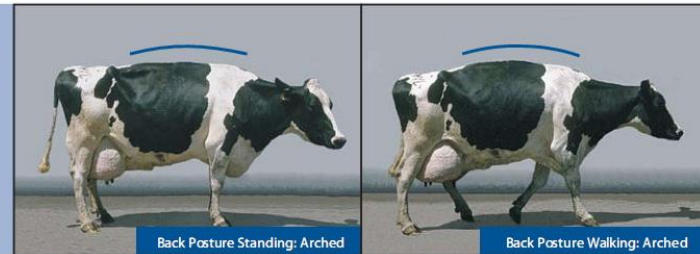


LOCOMOTION SCORE 3

Clinical Description:

MODERATELY LAME

Description: Stands and walks with an arched back and short strides with one or more legs. Slight sinking of dew-claws in limb opposite to the affected limb may be evident.



LOCOMOTION SCORE 4

Clinical Description:

LAME

Description: Arched back standing and walking. Favouring one or more limbs but can still bear some weight on them. Sinking of the dew-claws is evident in the limb opposite to the affected limb.



LOCOMOTION SCORE 5

Clinical Description:

SEVERELY LAME

Description: Pronounced arching of back. Reluctant to move, with almost complete weight transfer off the affected limb.



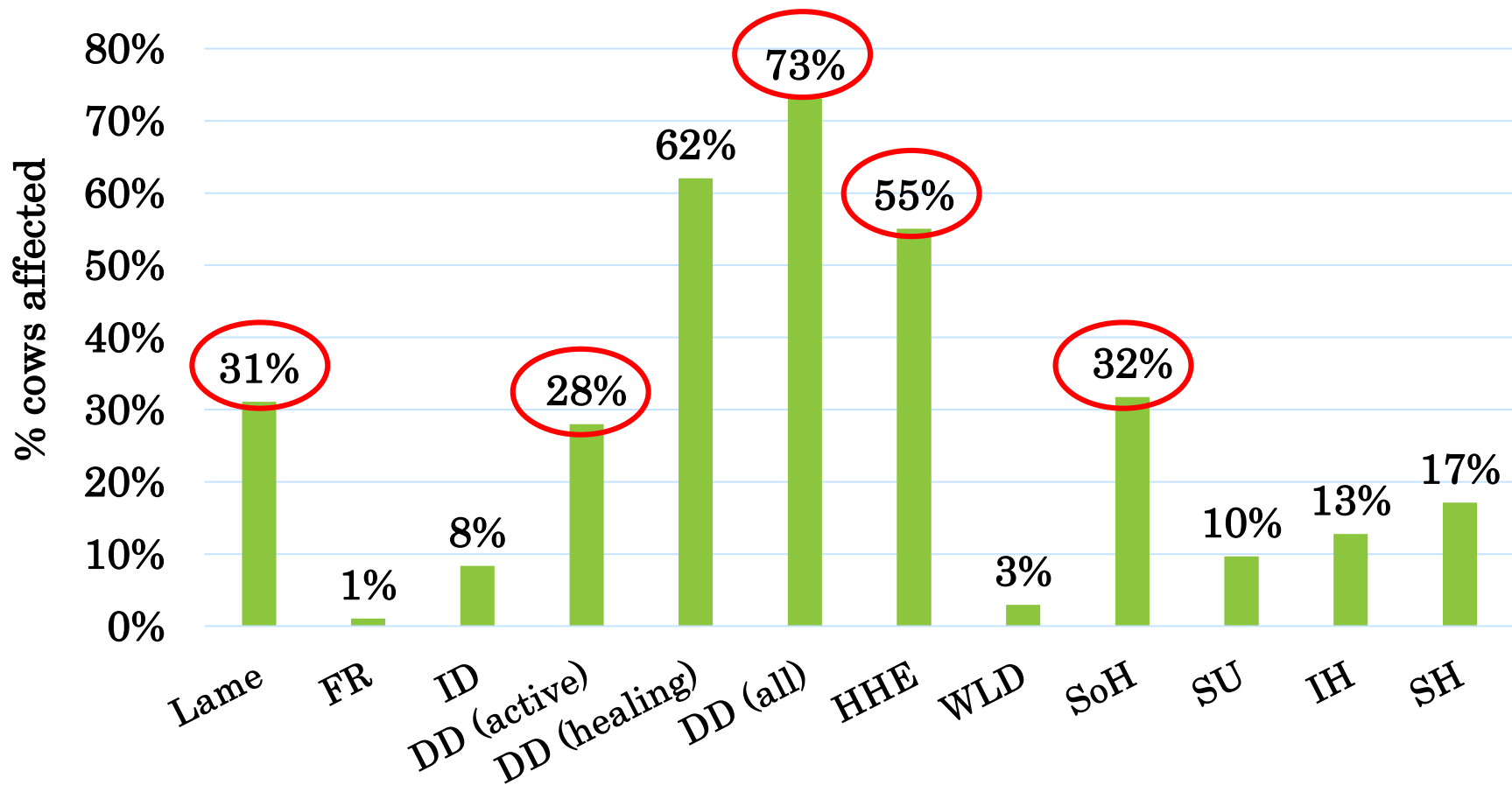
STUDY DESIGN

- Lesion scores → 4 point scale
 - Interdigital dermatitis (ID)
 - Digital dermatitis (DD)*
 - White line disease (WLD)
 - Sole ulcer (SU)
 - Interdigital hyperplasia (IH)
 - Footrot (FR)
 - Sole haemorrhages (SoH)
 - (Swollen heels (SH))



RESULTS

Prevalence of claw lesions

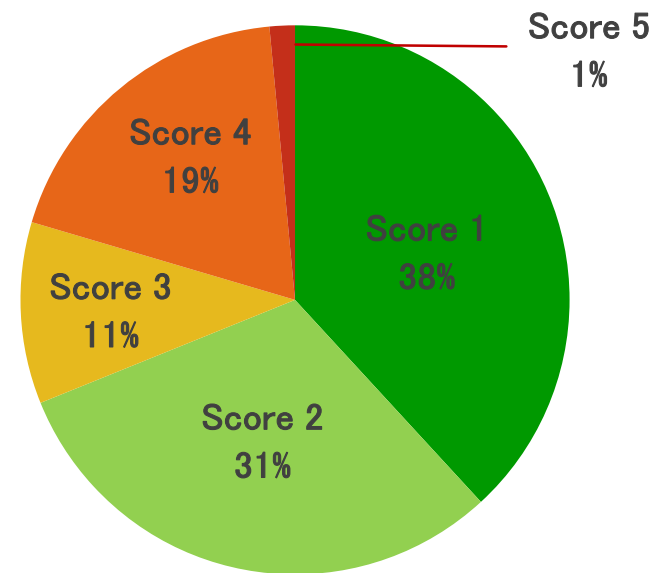


RESULTS & DISCUSSION

- Lameness

- Prevalence: 32 (\pm 14)%
- Range: 0 to 67%
- Comparable (Barker et al., 2010; Leach et al., 2012) or worse (Rutherford et al., 2009; Foditsch et al., 2016)

Mobility score



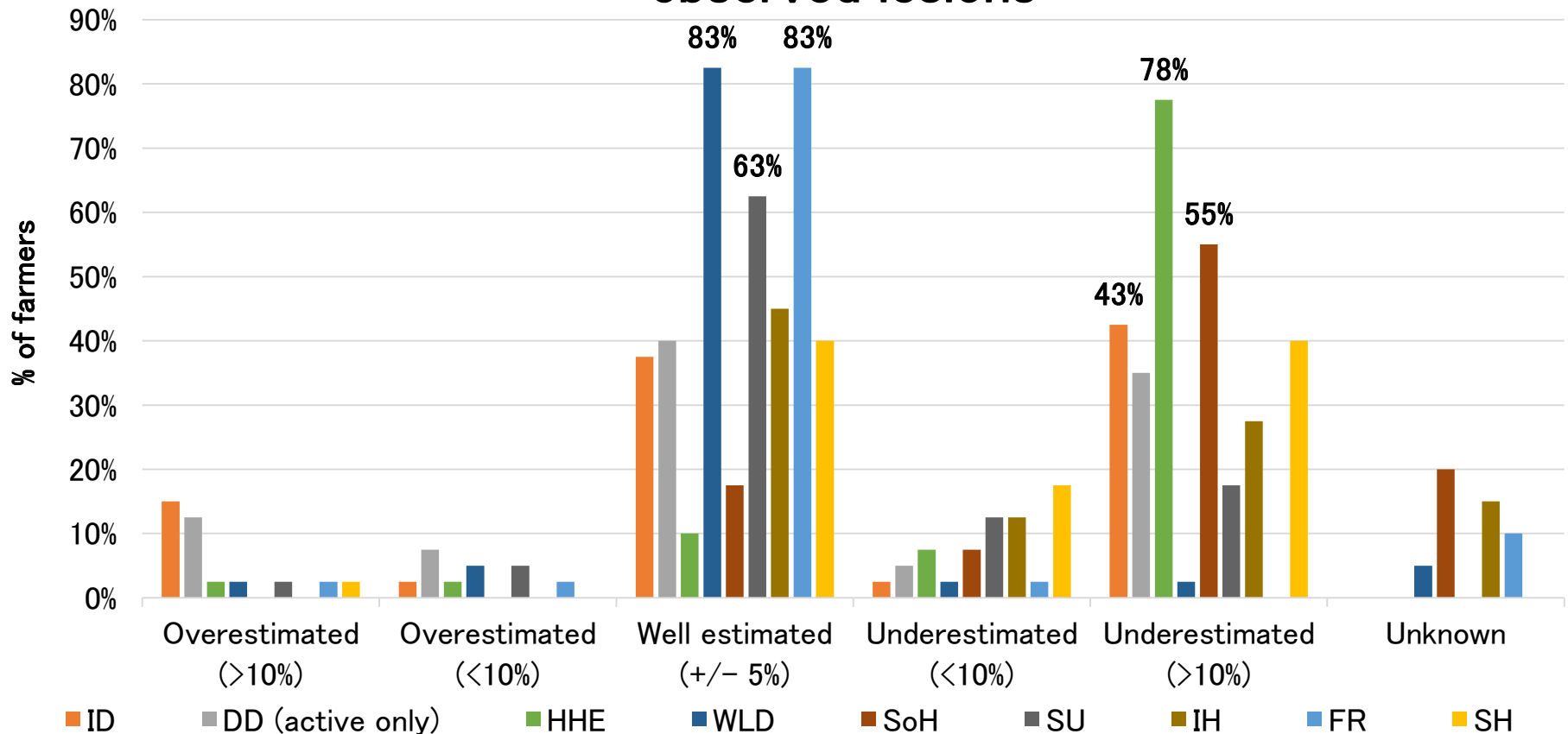
RESULTS & DISCUSSION

- Digital dermatitis (DD)
 - Prevalence: 28 (\pm 18%)
 - Range: 0 to 62%
 - Comparable (Somers et al., 2003; Holzhauser et al., 2006; Cramer et al., 2008; USDA, 2007; Yang et al., 2017) or worse



RESULTS & DISCUSSION

Comparison between the farmers estimation and observed lesions

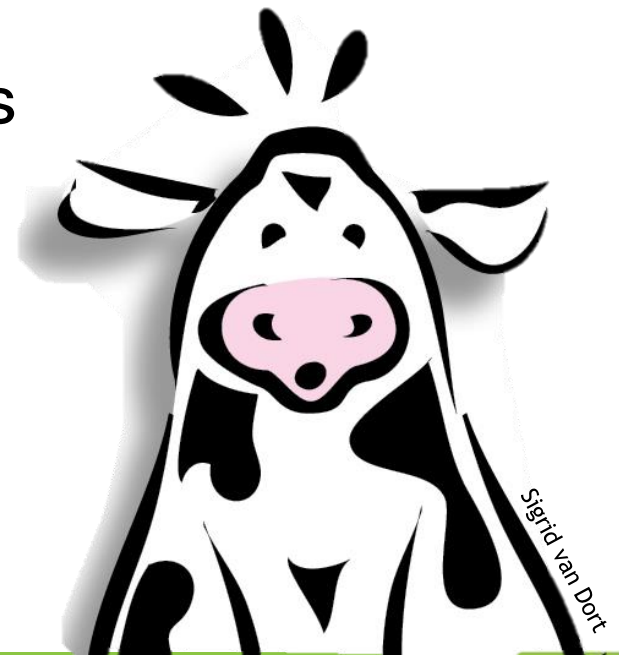


RESULTS & DISCUSSION: PERCEPTION

- Obvious lesions
 - WLD, FR, SU → estimated well
 - SH → estimated poorly
 - Less obvious lesions
 - ID, SoH, DD, HHE → estimated poorly
- Different definition for lameness (Horseman et al., 2014)

CONCLUSION: PREVALENCE

- Most prevalent:
 - Heelhorn erosion
 - Sole haemorrhages
 - Digital dermatitis
- Large differences between herds

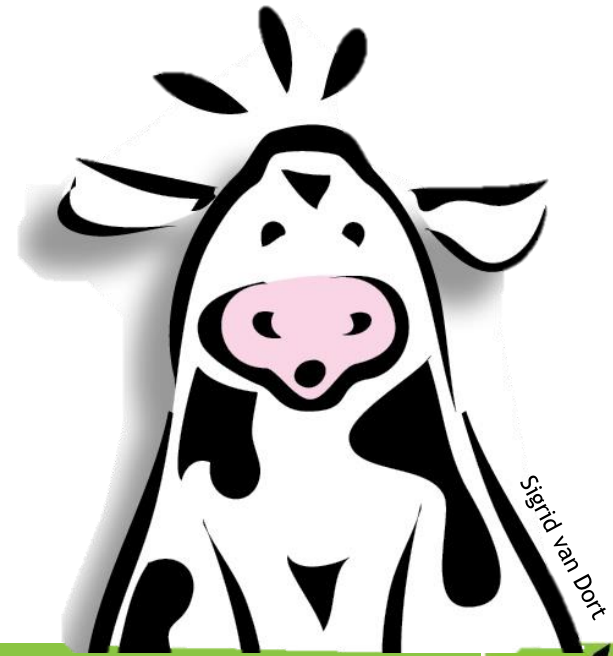


CONCLUSION: PERCEPTION

- Farmers struggle to detect
 - lameness
 - claw problems

→ Lack of

- knowledge?
- time invested?
- awareness?



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SOLUTION?

- Preventive measures
- Schooling
- Awareness!



Special thanks to

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& Jos Van Thielen,
Marcel Van Aert, Tom Heylen,
Johan Buyse

& all of the farmers



Europees
Landbouwfonds voor
Plattelands-
ontwikkeling: Europa
investeert in zijn
platteland.





Questions?