

Introduction

Current Nordic dairy herd health recording and the way forward

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Registrations in general

The goal by making registrations:

- Management tools (daily and strategic)
- Genetic tools (EBVs)
- Documentation

To create values for farmers

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Registrations in general

Requirements for both management, genetic and documentation tools:

Unique trait definition (code)

Complete registration

Easy and cheap registration

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Registrations in general

Requirement for both management, genetic and documentation tools:

Unique trait definition (code)

Complete registration (all)

Easy and cheap registration

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Nordic?

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Possibilities joint Nordic registrations

- Improved Nordic EBVs (NAV)
- Joint Nordic management tools (today national)
- Better comparison of health status across countries (difficult today)

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NAV focus registrations

The goal to register the same traits in all three NAV countries

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Harmonization of type traits

- **Type traits**
 - **Exactly the same traits classified (start 2005) (Finland 4 new, Denmark 1 new)**
 - **Joint manual**
 - **Nordisk classifier workshop every 2nd year**

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Harmonization of calving traits

**Calving ease
(Sweden changes to
four classes during
2012)**



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Harmonisation of claw diseases

Nordic Claw Atlas 2011

Trait	Grade	Description	Comments
Dermatitis	1 mild	Inflammation of the digital and/or interdigital skin with exudation or dry crusts (hyperkeratosis). Not painful	
Digital dermatitis	2 severe	Inflammation of the digital and/or interdigital skin with erosion, bleeding ulcerations. Painful and can cause lameness	M2 (Döpfer et al., 1997)
Heel horn erosion	1 mild	Superficial erosions of the bulbs, pits, V-shaped or circular. Not painful.	
Heel horn erosion	2 severe	Profound erosions of the bulbs, typical V-shaped or circular, extending to the corium	
Sole hemorrhage	1 mild	Superficial hemorrhage of the horn of sole and/or white line, disappears at normal trimming	
Sole hemorrhage	2 severe	Profound haemorrhage of the horn of sole and/or white line, remains after trimming	
Sole ulcer	1 mild	Penetration through the sole horn exposing fresh corium. Most likely lameness	
Sole ulcer	2 severe	Penetration through the sole horn exposing affected corium with necrotic miss coloured tissue and or protruding granulation tissue. Lameness	
Wart growth	1	Papillomatoes dermatitis, chronic stage of digital dermatitis	
ID hyperplasia	Only recorded in one grade	Interdigital growth of fibrous tissue	

Trait	Grade	Description	Comments
ID phlegmon	1	Interdigital infection with <i>Fusobacterium necrophorum</i> , open wound, swollen foot, fever, odorous smell, lameness	
Fissure white line	1(mild)	Separation in the white line, present after normal trimming. Separation needs to be removed, leaving normal horn wall and white line	
Abscess, ulcer of white line	2 (severe)	Purulent exudation originating from a fissure of the white line, lameness	
Abscess, ulcer of toe	2 (severe)	Ulceration of toe with abscess and or necrotic tissue, lameness	
Double sole	Only recorded in one grade	Two or more layers of undermined sole horn	
Laminitic ring	Only recorded in one grade	Concave deviation of the dorsal wall with horizontal lines i.e. laminitic ring	
Asymmetric claws	Only recorded in one grade	Significant difference in width between outer and inner claws	
Screw claw	Only recorded in one grade	Inward torsion length wise of the either outer or inner claw	Least tendency should be recorded
Over grown claws	Only recorded in one grade	Severely overgrown toes	
Scissor claws	Only recorded in one grade	Tip of toes crossing each other	
Lameness	1, mild	Stands normal but walks with an arched back and with stiffness	
Lameness	2, severe	Stands and walks with and arched back and is clearly lame, bobbing of the head	
Hock lesion	1 mild	Swollen hock with superficial decubital injury	
Hock lesion	2 severe	Swollen hock with ulcer	

Harmonistaion of claw diseases

Nordic Claw Atlas 2011

engelsk:	Heel horn erosion
dansk:	Balleråd / Balleforrådnelse
svensk:	Klövröta
Finsk:	Kantasyöpymä

Mild



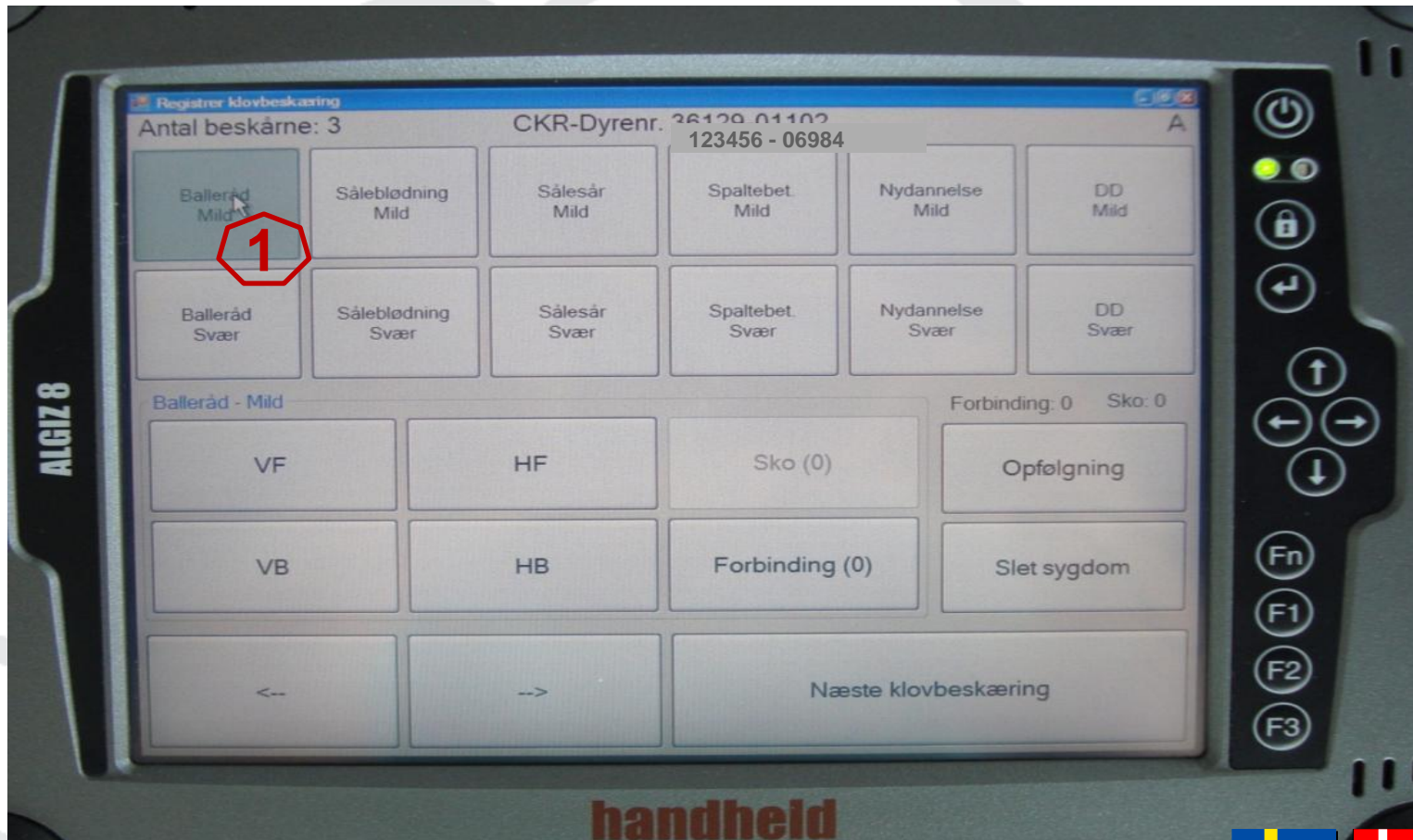
Severe





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Joint Nordic registrations program



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Disease registration

More than 300 disease codes

Treatment policy differ between countries
and years

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Large country and year differences in
disease incidences

NAV work
Johansson, 2008

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Handling of diseases in EBVs

Mastitis – pooled across several codes

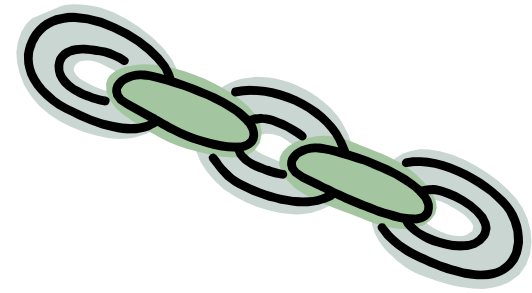
Other diseases pooled within

- Reproductive diseases
- Metabolic diseases,
- Feet and legs diseases

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Nordic cooperation

- Data collection – joint by common IT solutions
 - Program for type traits registrations (developed in Finland)
 - Program for registration of claw health data (developed in Denmark)
- Registration – 100% the same for all new and old traits across (F, S, DK and partly N)
 - Claw trimmer data – 100% the same definitions of diseases
 - Type traits – joint manual
 - Calving traits – Sweden change to 4 classes

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Possibilities joint Nordic registrations – health traits

- Improved Nordic EBVs (NAV)
- Joint Nordic management tools (today national)
- Better comparison of health status across countries (difficult today)

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How can we improve the health recording systems?

National

- Unique trait definition, (code)
- Complete registration (all)
- Easy and cheap registration

or

Nordic

- Unique trait definition (code)
- Complete registration (all)
- Easy and cheap registration

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Questions



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