

# Collection of DNA

## Danish experiences

NAV workshop  
Copenhagen, January 2014

Anders Fogh

**NAV**



Nordisk Avlsværdi Vurdering • Nordic Cattle Genetic Evaluation

Den Europæiske Landbrugsfond for Udvikling af Landdistrikterne:  
Danmark og Europa investerer i landdistrikterne

Ministeriet for Fødevarer,  
Landbrug og Fiskeri



Den Europæiske Landbrugsfond  
for Udvikling af Landdistrikterne

**LDP 2020**



Se Den Europæiske Landbrugsfond for Udvikling af Landdistrikterne

STØTTET AF

mælkeafgiftsfonden



# Future in genomic testing

- **Prices will go down on genomic test**
- **Prices on sexed semen will go down**

**Possible economic advantage in testing females on a large scale in many herds**

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I told last year:

# Sample with minimal effort and maximal reliability!

Sampling - part of  
normal work flow



Unique connection between  
tag and sample



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**I told last year:**

## **New equipment for tissue sampling**

- **Combined ear tag and sampling applicator**
- **Used for BVD control in Italy and Great Britain**
- **Advantage: Unique connection between ear tag number and tissue sample number**

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**I told last year:**

## **Danish pilot study**

- **Experience with use of tag – not test!**
  - **Workflow of putting in tags**
  - **Problems with tags afterwards**
- **Holstein and Jersey herd**
- **Approx. 120 tags per herd**
- **November 2012 – May 2013**
- **Frozen samples are genomic tested by Genoskan**

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**I told last year:**

## **Danish pilot study**

- **How well does conserving liquid work**
  - **15 calf's with double samples per herd**
  - **Refrigerator, room temperature (dark, light)**
- **Samples tested by Genoskan**

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# What did we learn from pilot study?

- **Tags are easy to use**
- **Important to do tagging systematically**
- **Bit more time consuming than ordinary tags**  
**correct top/bottom important**

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# What did we learn from pilot study?



**Traditional applicator doesn't work!**

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# What did we learn from pilot study?

## Conserving:

- Tissue seems to have good quality no matter how it is conserved

**BUT we recommend that tissues is stored in deep freezer or refrigerator!**

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# Next step!

- Allflex did develop a new part to existing applicator that fixate liquid container
- Tested in 3 herds in September/October 2013
- Problem is fixed!

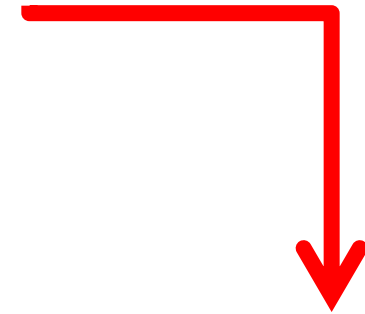
Ready for use in large scale!



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# Procedure for large-scale collection



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# Evaluation of procedure

- Use in 2 - 3 months (**start December 2013**)
- 5 - 10 herds (**presently 8 herds**)
- Farmers and Genoskan evaluate

Positiv respons – more herds

Negativ respons – revision of procedure

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