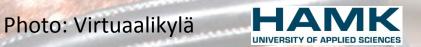
# Time management in stable routines

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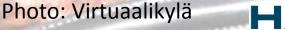
## Background

- Daily stable routines are very labor-intensive manual work by tradition
  - feeding, taking horses to the paddocks and keeping the stable clean
- In Finland, working times at stables have been researched only few times - idea to measure time in different stables

Photo: Virtuaalikylä HAN

### Material and methods

- HAMK implemented a case study in cooperation with advisor organization ProAgria at five stables in 2013
- Aim was to find out
  - how much time is used for stable duties daily
  - what are the reasons for diversity in workloads





### Material and methods

- Stables represented purposely different forms of activity - basic routines were same
  - Riding school, (trotter) training stable, breeding stable and two boarding stables
- One day at each stable measuring the working times and distances between the facilities

Photo: Virtuaalikylä



## Results – roughage feeding

- "Traditional", small square baled hay the least time consuming way to feed roughages (in the stable and paddock)
  - Big (silage) bales and (slow feeding) hay nets are slower ways to feed haylage
  - Average time to roughage feeding: 51 sec/horse
     (varied 23-73 sec/horse!)
    - Preparing and handing-out included



## Results – concentrate feeding

- A ladle from a feeding trolley was the fastest way to give the concentrates
  - Simple and uniform feeding!
- The average time per horse was 18 seconds
  - In most cases the last feeding (in the evening) was the most time-consuming because of supplementary feeds

10/03/2012

Photo: Terhi Thuneberg



## Other stable routines - paddocking

- Distance between the paddocks and the stable is relevant when taking the horses out
  - "Blanketing"?
  - Leading two horses?



Photo: Terhi Thuneberg



#### Stable 1

To paddocks: 25-51 m

Manure and bedding storages

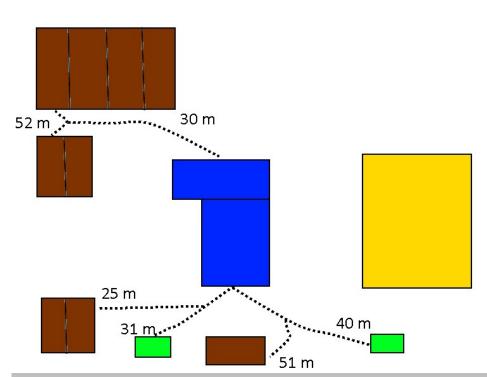
further

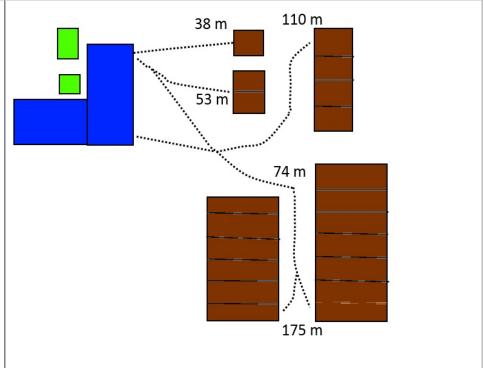
#### Stable 2

To paddocks: 38-175 m

Manure and bedding storages

next to stable







## Other stable routines - cleaning

- Big variation (1,7 6,4 minutes) in the mean cleaning time (5,4 minutes) per one box because of:
  - Bedding materials and systems
  - Cleaning facilities
  - Worker
  - Distance between stable and manure and bedding storages

Photo: Terhi Thuneberg HAME

# Comparison of two boarding stables

Working time in one day:



# Stable 1 24 horses 13 minutes /horse/day Total working time 5,24h/day

Stable 2
19 horses
24 minutes /horse/day
Total working time 7,65h/day

Photo: Virtuaalikylä



# Comparison of two boarding stables

- total working time
  - Stable 1: 1900 h/year
  - Stable 2: 2800 h/year
- ⇒In stable 1 total working time 0,5 man-year (full time equivalent, Fte) less than in stable 2
- ⇒12 000€ smaller costs
- ⇒ ~40€ smaller costs/horse/month



### Conclusions

- Results cannot be compared directly; several factors affect
- Place the operations rationally (take into account already in construction planning!) ⇒
   avoid wasted steps and stages
- Use automation (feeding and manure removing) ⇒ simplify and quicken the work and shorten the working day

Photo: Irina Keinänen



### Conclusions

- Use appropriate and ergonomic tools and machines
- Stop to think and measure (step counter/tracker etc.) benchmark and test develop and improve!
- Saving in working time means decreasing in labour costs and better profitability!
- **⇒Welfare!**

Photo: Irina Keinänen



## Thank you for your attention!

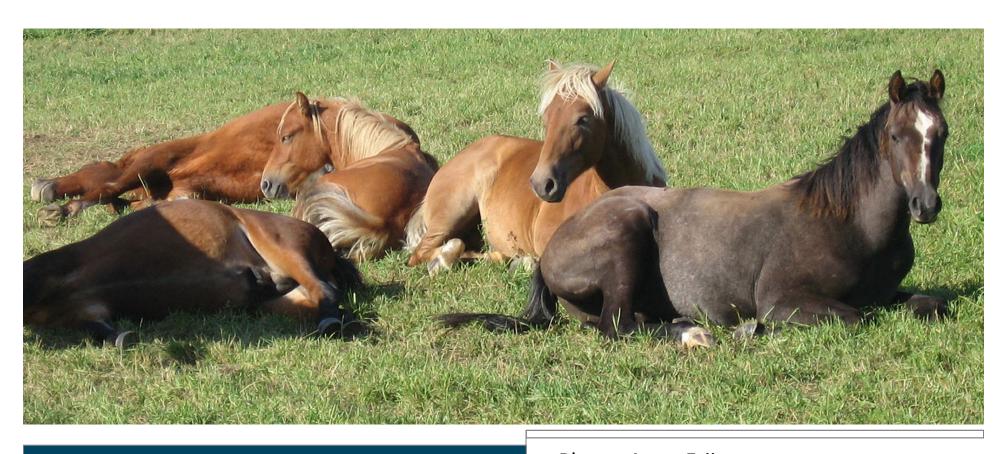


Photo: Anne Friis

