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
Material and methods

- HAMK implemented a case study in co-operation 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

Photo: Virtuaalikylä
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**
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
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
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
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