



Horse is born to pasture

University of Helsinki,
Dep. Agricultural Sciences
Irina Herzon, Cathrine Schreurs, Hanna
Seitäpuro, Outi Kankaanpää, Heljä Marjamäki

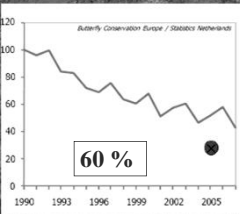
MTT Animal Production
Markku Saastamoinen, Susanna Särkijärvi,
Marianna Myllymäki, Tiina Reilas



Why pasturing is relevant for the society?

- Extensive grazing - a key management tool to support biodiversity in Europe
- Grazing has been in decline

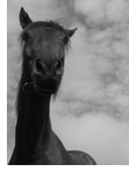
Dire state of biodiversity




Biotopes	Status
Itämeri, vedenalaiset	Uhanalainen CR
Itämeri, rannikko	Uhanalainen CR
Sisävedet ja rannat	Uhanalainen CR
Suot	Säilyvä LC
Metsät	Säilyvä LC
Kalliot ja kivikot	Säilyvä LC
Tunturit	Säilyvä LC
Traditional biotopes	Uhanalainen CR

Van Swaay & Van Strien (2008) Report for EEA

Can the equine sector help the society? ... and itself?



- 1) In some regions, more horses than cows or sheep
- 2) Paddock is NOT a pasture
- 3) Intensively cultivated pasture = "green desert"



Objectives


- o Estimating the feeding value and nutrient intake of horses, and
- o Estimating impact of horses on vegetation and ground (trampling) on semi-natural and permanent pastures

-> Optimizing the grazing pressure and pasture management

Other output

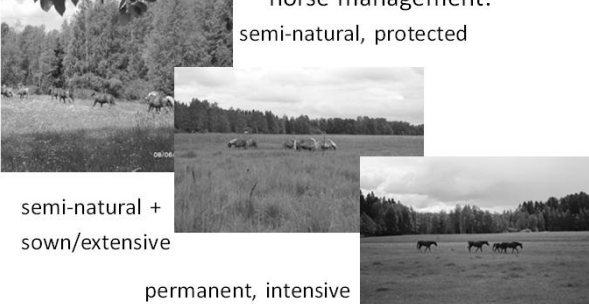
- o Improved knowledge on pasturing of horses -> Best Practices Webtool, Innoguidebook, Pasturing Guide (in Finnish)
- o Improved support for pasturing -> Policy recommendations

Hevonen hoitaa luontoa – luonto hoitaa hevosta
Opas hevosaille
Hankehakemus 2012



Research

Summer 2012, three case pastures, all long-term horse management:
semi-natural, protected



semi-natural + sown/extensive

permanent, intensive

Research


Data:

- Nutritional status, body weight
- Health data (e.g. insect bites, injuries)
- Forage quality
- Survey of vegetation and ground
- Interviews with 50 horse owners and pasture owners




RESULTS: Interviews

- Benefits to horses – top reason: gradual foraging and moving, more and varied exercise, healthy digestive system, less behavior problems, socializing in a herd,
- Also to the owners (ease on the owner's workload), and ...
- To the environment: landscape, use of resources



31.08.2013 Ypajä

- Most frequently mentioned challenges: insects and weeds (= unpalatable plants).
- Desired information: establishing and managing pastures, suitable types, sown and native species, benefits from pastures (esp. to urban people).




Everyone with access to pastures was satisfied

10

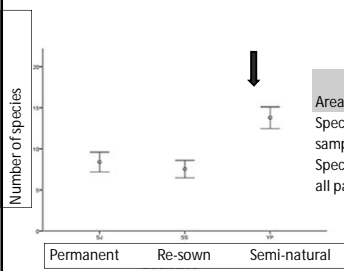
RESULTS: Welfare and health

- Mainly increased weight
- Only small scratches
- Few insect bites



Portable stock

RESULTS: Biodiversity



Area	Semi-natural	Perma-nent	Re-sown
Species Richness, sample squares	116	48	40
Species Richness, all pasture	135	106	96

On semi-natural pasture - the highest biological diversity
On intensive pasture, still high diversity - WHY?

12

RESULTS: Selective grazing

All grasses and clovers – clear preference
 Also eaten: at least 15 more native species
 Some poisoning plants present but avoided

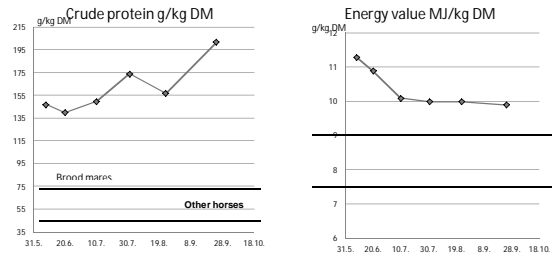


-> pasture and vegetation become heterogeneous,
 -> some species survive better.

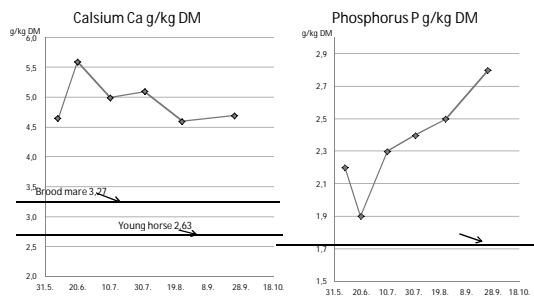
- 1) Meadow indicator species:
 selected – 7 spp avoided – 25 spp
- 2) Usefulness for pollinators – equally good



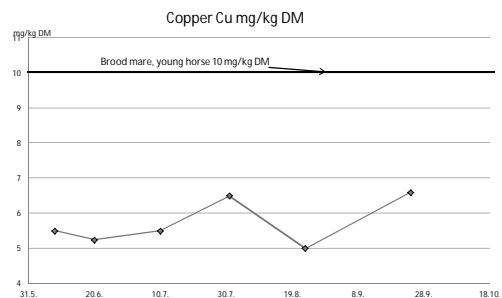
RESULTS: Feed values



Averaged values for the case pastures

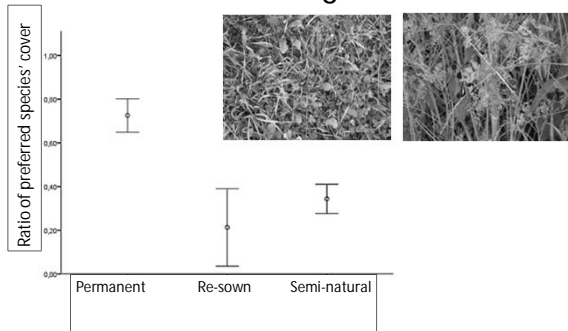


Averaged values for the case pastures

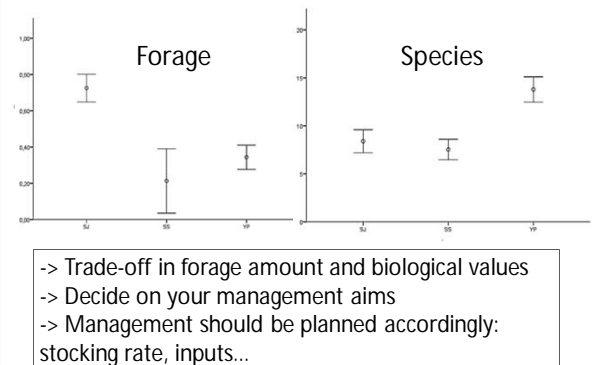


Averaged values for the case pastures

RESULTS: Forage amount



Trade-offs



-> Trade-off in forage amount and biological values
 -> Decide on your management aims
 -> Management should be planned accordingly:
 stocking rate, inputs...

Semi-natural, Ypäjä



Management has to be diversified: mechanic clearing or alternate grazing by sheep

19

Re-sown/extensive, Särkisaari

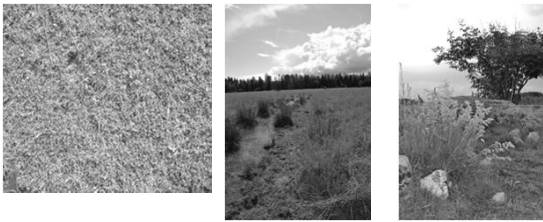


Partly unsuccessful conversion of permanent pasture into sown

Managing weeds – difficult on an island

20

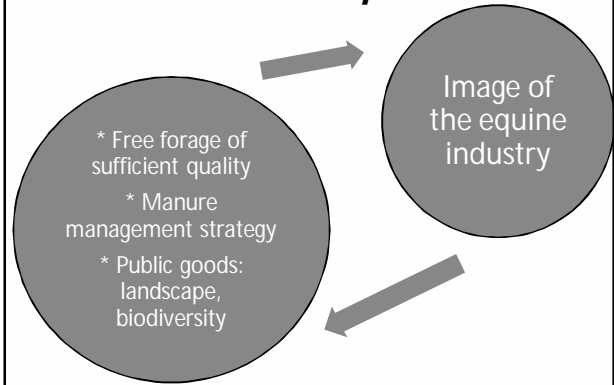
Permanent/undersown/intensive Savijärvi



A trade-off (good fodder and nature values) - resolved through non-grazed/non-managed elements

21

All horses onto pastures!



THANK YOU!

Disclaimer: The managing authority is not responsible for the content presented by the project.

