Horse is born to pasture

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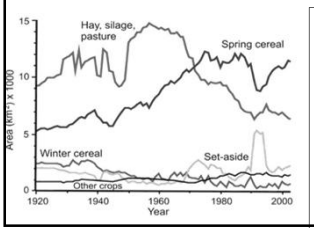
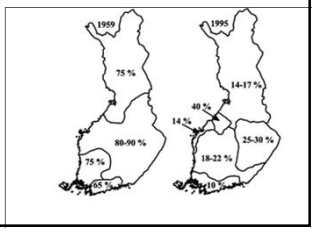
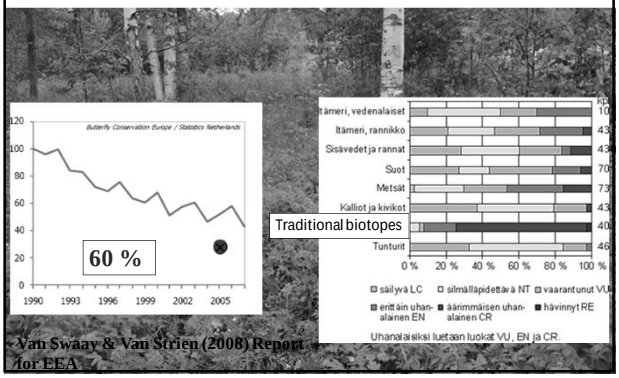
Why pasturing is relevant for the society?

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





Dire state of biodiversity



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

Research

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

semi-natural, protected

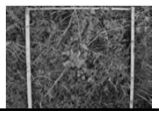
semi-natural + sown/extensive

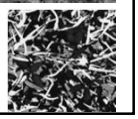
permanent, intensive

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

- 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).

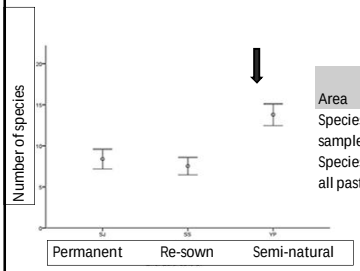
Everyone with access to pastures was satisfied

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?

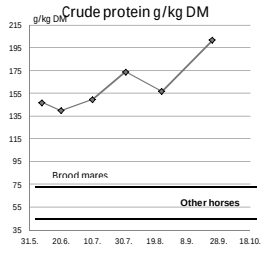
RESULTS: Selective grazing

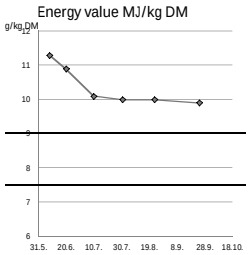
All grasses and clovers – clear preference
Also eaten: at least 15 more native species
Some poisoning plants present but avoided

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

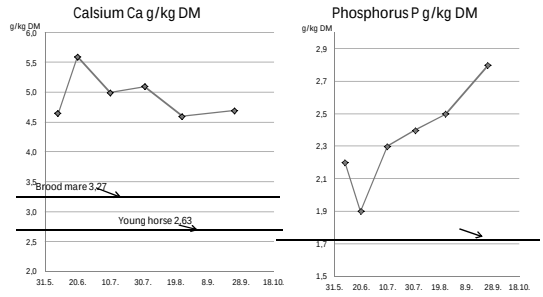
1) Meadow indicator species:
selected – 7 spp avoided – 25 spp
2) Usefulness for pollinators – equally good

RESULTS: Feed values





Averaged values for the case pastures



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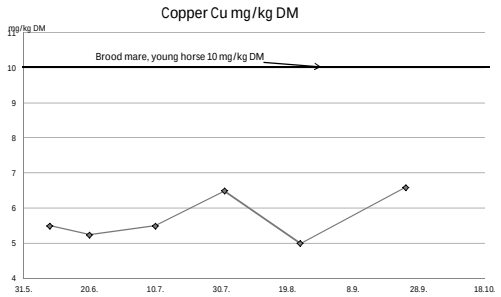
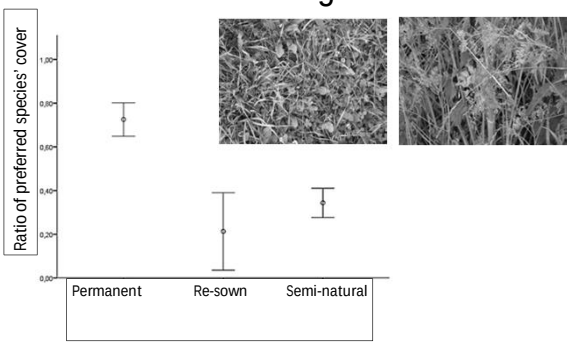
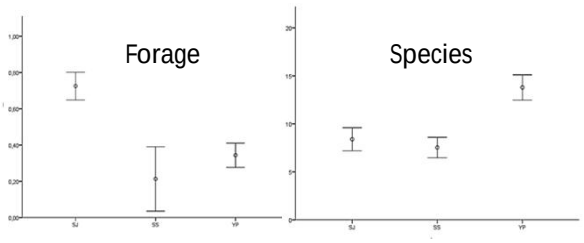


Averaged values for the case pastures

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

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Re-sown/extensive, Särkisaari


Partly unsuccessful conversion of permanent pasture into sown
Managing weeds – difficult on an island

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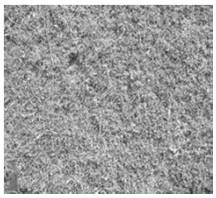
Permanent/undersown/intensive Savijärvi



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

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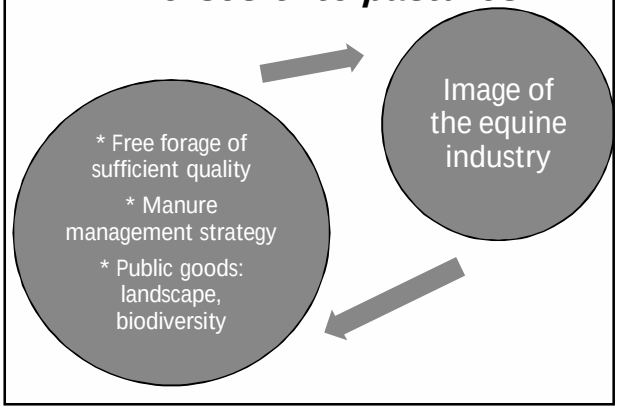
All horses onto pastures!



THANK YOU!

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

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