

SER Europe Conference 2016
Best Practice in Restoration

Planning and Evaluation of Restorational Grazing Projects: Pasture Suitability and Animal Movements

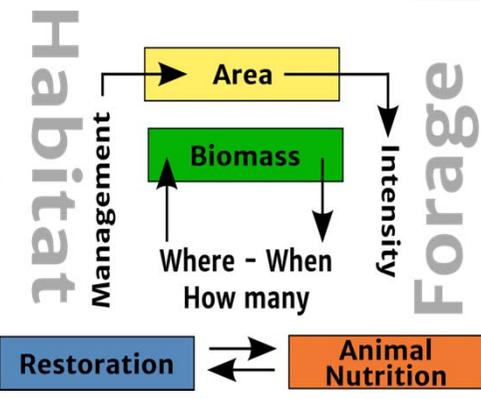
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Restoration & Pasture Planning Embedded in Project Management



Restoration & Management, Embedded in Land Use



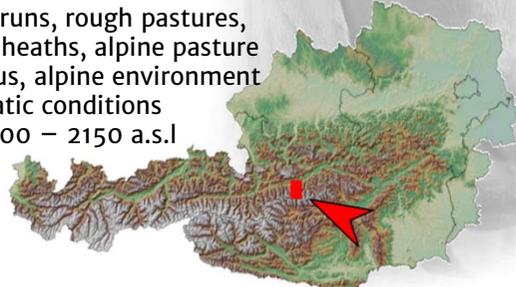
Pilot Study Area

Austria, Styria (Alps)

- Haus im Ennstal, Hauser Kaibling Mountain
- ~110km SE of Salzburg (N 47,39° E 13,78°)
- Study Area: 11.2 km²

Pasturing area

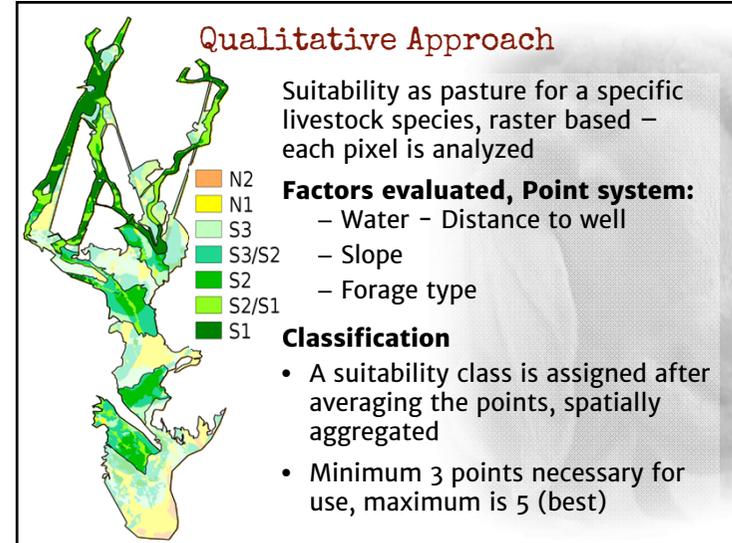
- 271 ha: Ski runs, rough pastures, sub-alpine heaths, alpine pasture
- Mountainous, alpine environment
- Harsh climatic conditions
- Altitude: 1300 – 2150 a.s.l



Alpine Pasture Evaluation Model

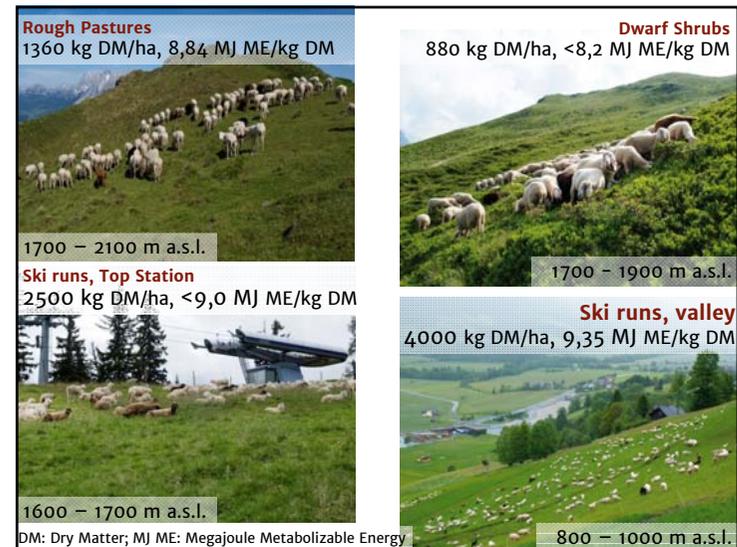
A model for the evaluation of **suitability** and estimation of **forage potential** of alpine pastures:

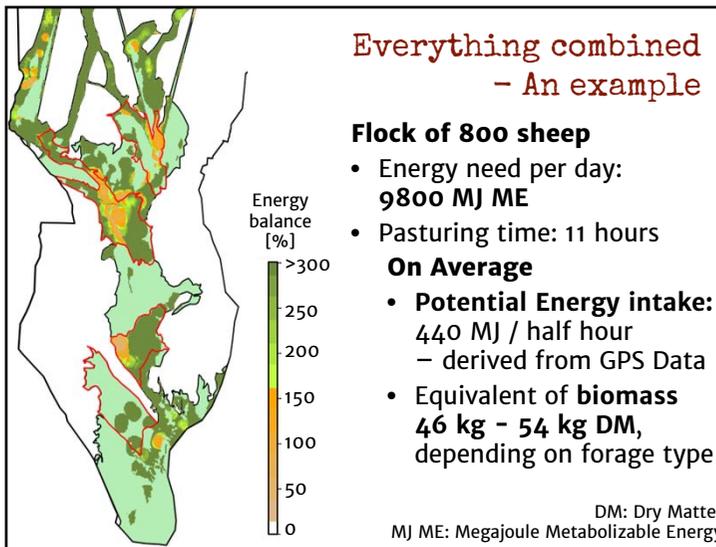
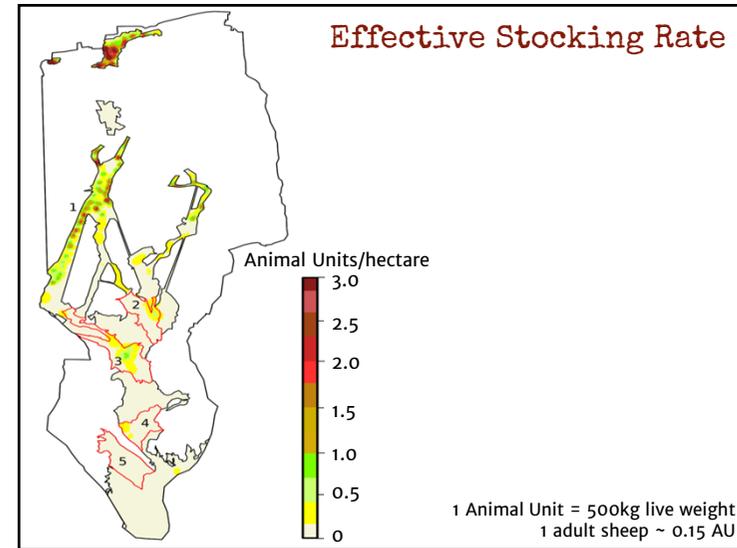
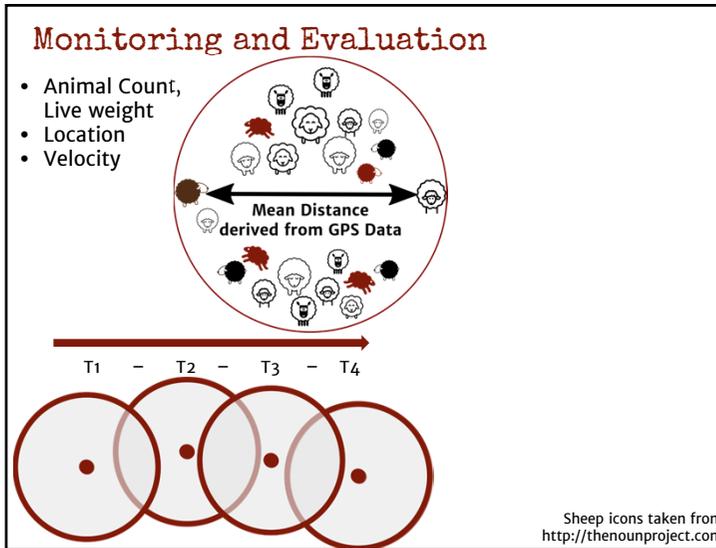
- **Qualitative approach**
...evaluation of suitability...
Raster-based classification of pasture area
- **Quantitative approach**
...estimation of forage potential...
Raster-based (spatially explicit) calculation of biomass and energy yield



Quantitative approach

- **Classification of vegetation** into “forage types”
 - Rich pastures
 - Ski runs
 - Rough pastures
 - Dwarf shrubs
- **Estimation Biomass and energy yield** is derived from regressions/statistical models, specific for the region, supported by expert knowledge, along the altitudinal gradient (length of vegetation period)





Conclusions, to Take Home

The combination of a spatial approach with data from animal nutrition is a suitable answer to the asymmetry between restoration and production.

The model helps in planning, documenting and presenting restoration projects involving pasture management

It connects people with the important processes, for the better of the landscape

