

Conference on High Nature Value grasslands: securing the ecosystem services of European farming post 2013
7-9 September 2010, Sibiu

**Southeast Transylvania:
the challenges of one of Europe's largest
lowland HNV farmland
Natura 2000 sites**

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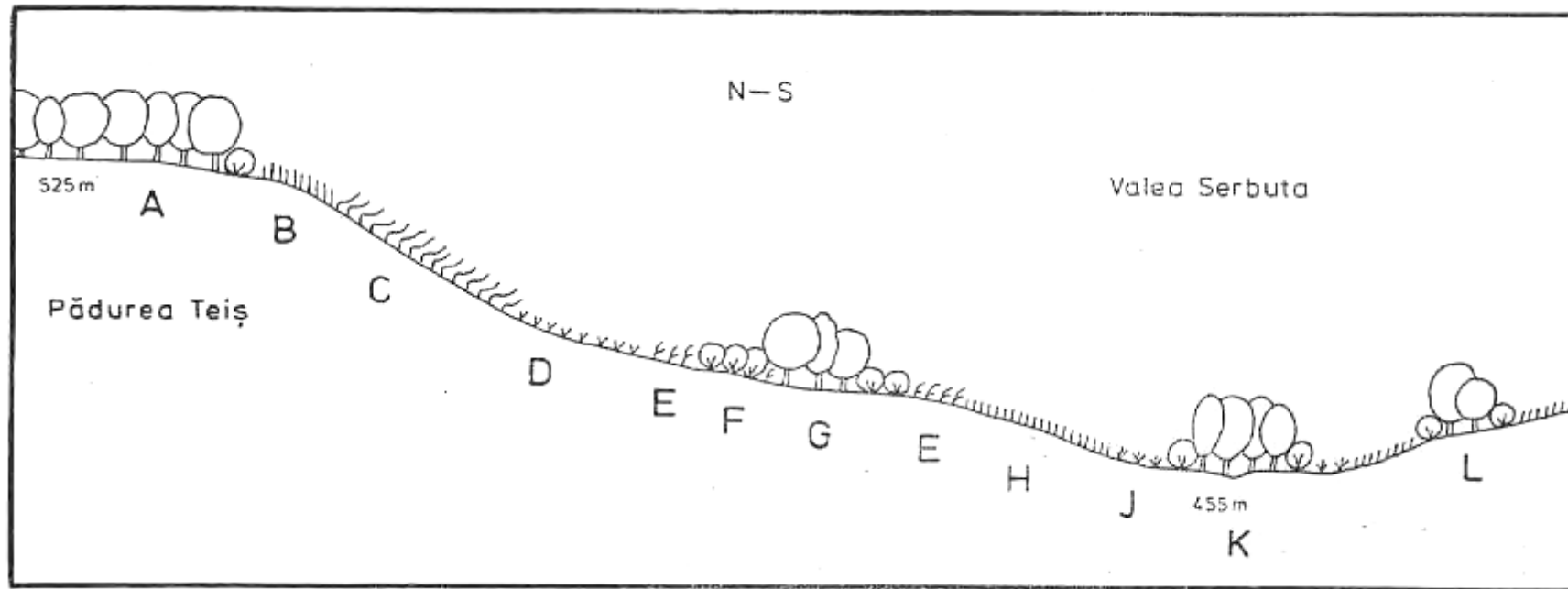


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The Southern Transylvanian Tableland (Podișul Transilvaniei de Sud) have a high landscape diversity:
diversity of structures, site conditions, habitats and species



Vegetation profile /plant communities disposed along ecological gradients - repartition of vegetation on the right slope of Șerbuța-Valley in Southern Transylvania



A: Oak-Hornbeam forest (*Quercus petraeae*-*Carpinetum*); **B:** Small-Almond bush (*Amygdaletum nanae*) and tall herbaceous vegetation with *Peucedanum* ssp., *Dictamnus albus*, a.o.); **C:** Feathergrass community with xerophilous species (*Stipa pulcherrima*, *Salvia nutans*); **D:** grassland with *Festuca valesiaca*, **E:** xero-mesophilous meadows (*Dorycnio-Brachypodietum*); **F:** Blackthorn bushes, **G:** tree hedge; **H:** mesophilous hay meadow, **J:** wet riverine meadow, **K:** riverine Willow-woods, **L:** hedge on the left slope in Northern exposition



Steppe like meadow with *Stipa tirsia* (=stenophylla) and *Salvia nutans* in Southern exposition

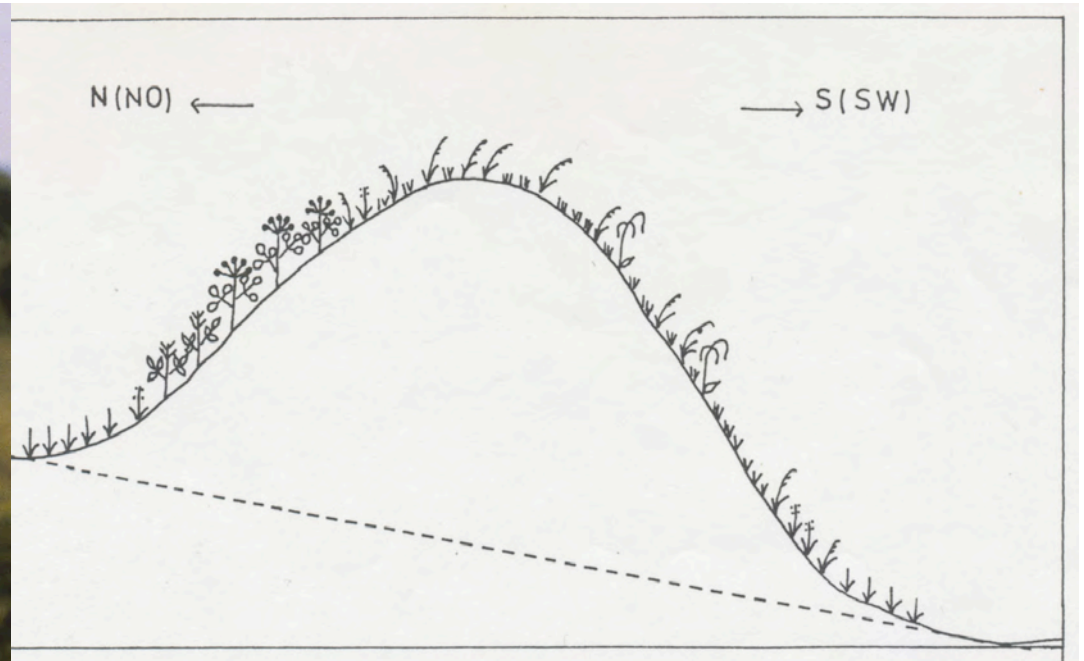


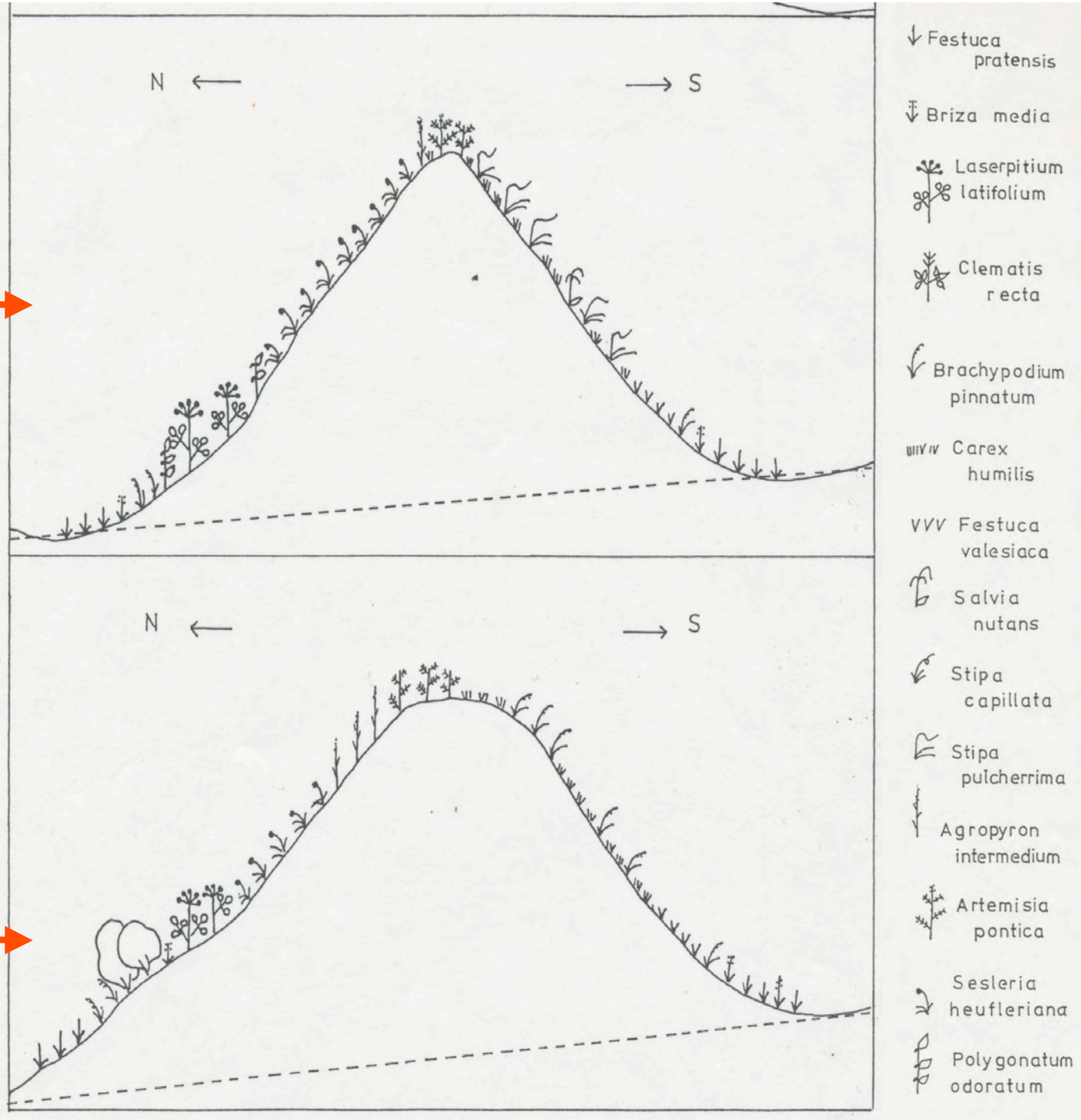
**Habitat structures
are conditioned by:**

- **Macro- and microrelief**
- **Edaphic and climate conditions**
 - **exposition**
 - **inclination**
 - **related light conditions**
- **soils**
- **present and former land use**



Wet Cnidion type meadow (Habitat type 6410) in the Hârtibaciu valley







Trollius europaeus



Orchis militaris



Veratrum nigrum



Echium russicum



Iris pumila

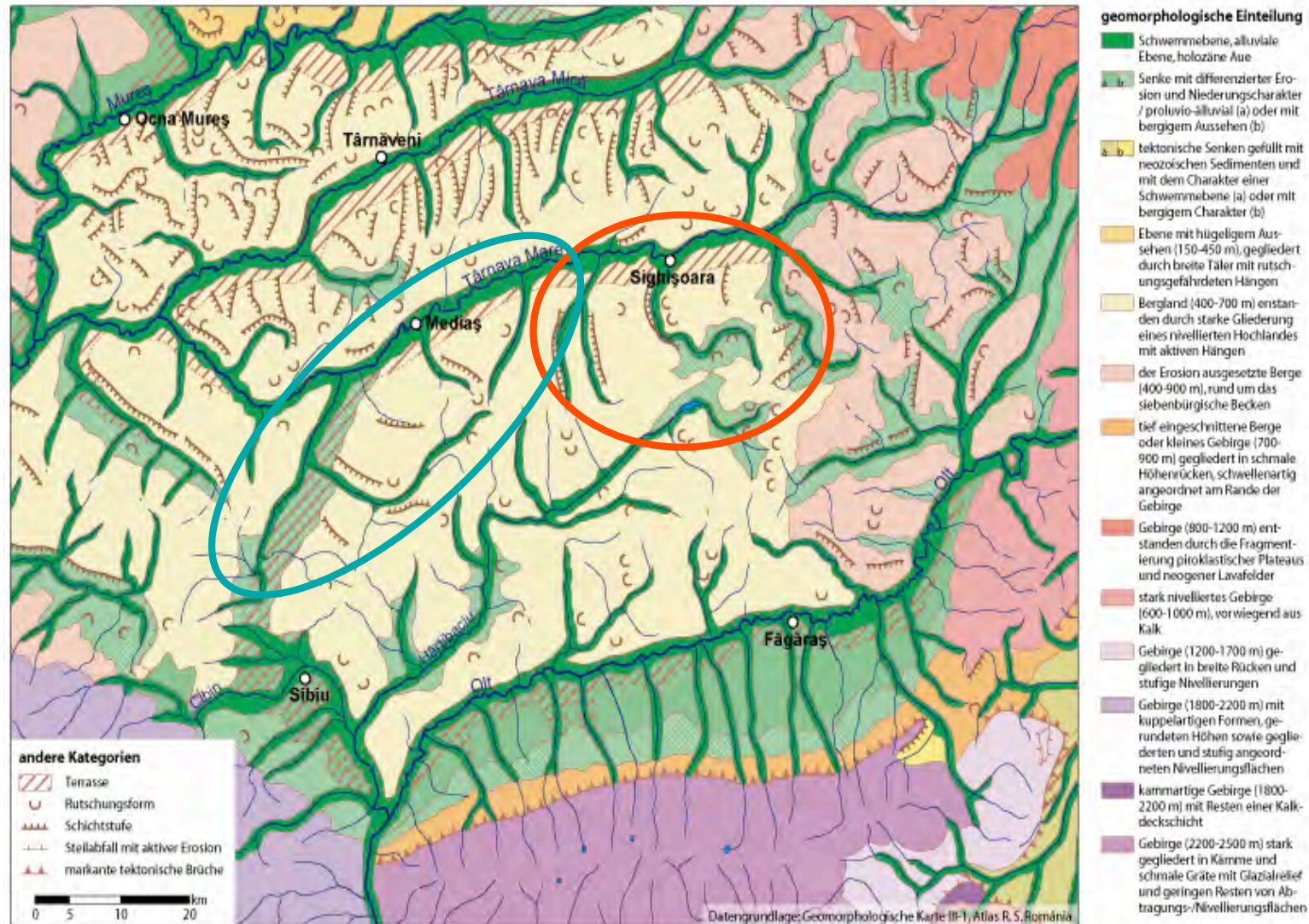


Salvia nutans



The Natura 2000 sites we are focussing on (SCI and SPA) cover a vast area of mainly grasslands / farmland (pastures and meadows)

Geomorphologische Karte des Karpatenbeckens - Teil südöstliches Siebenbürgen

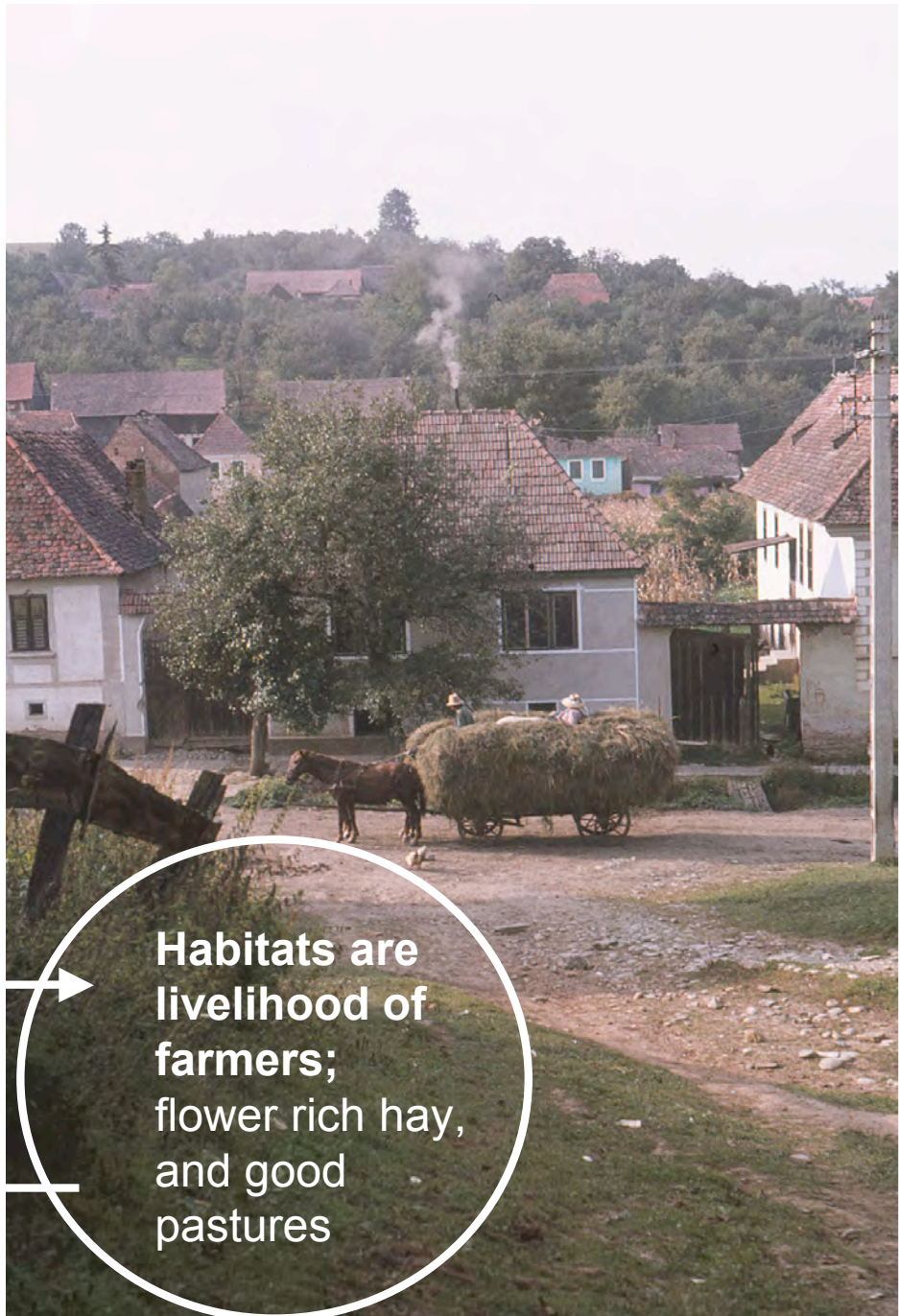
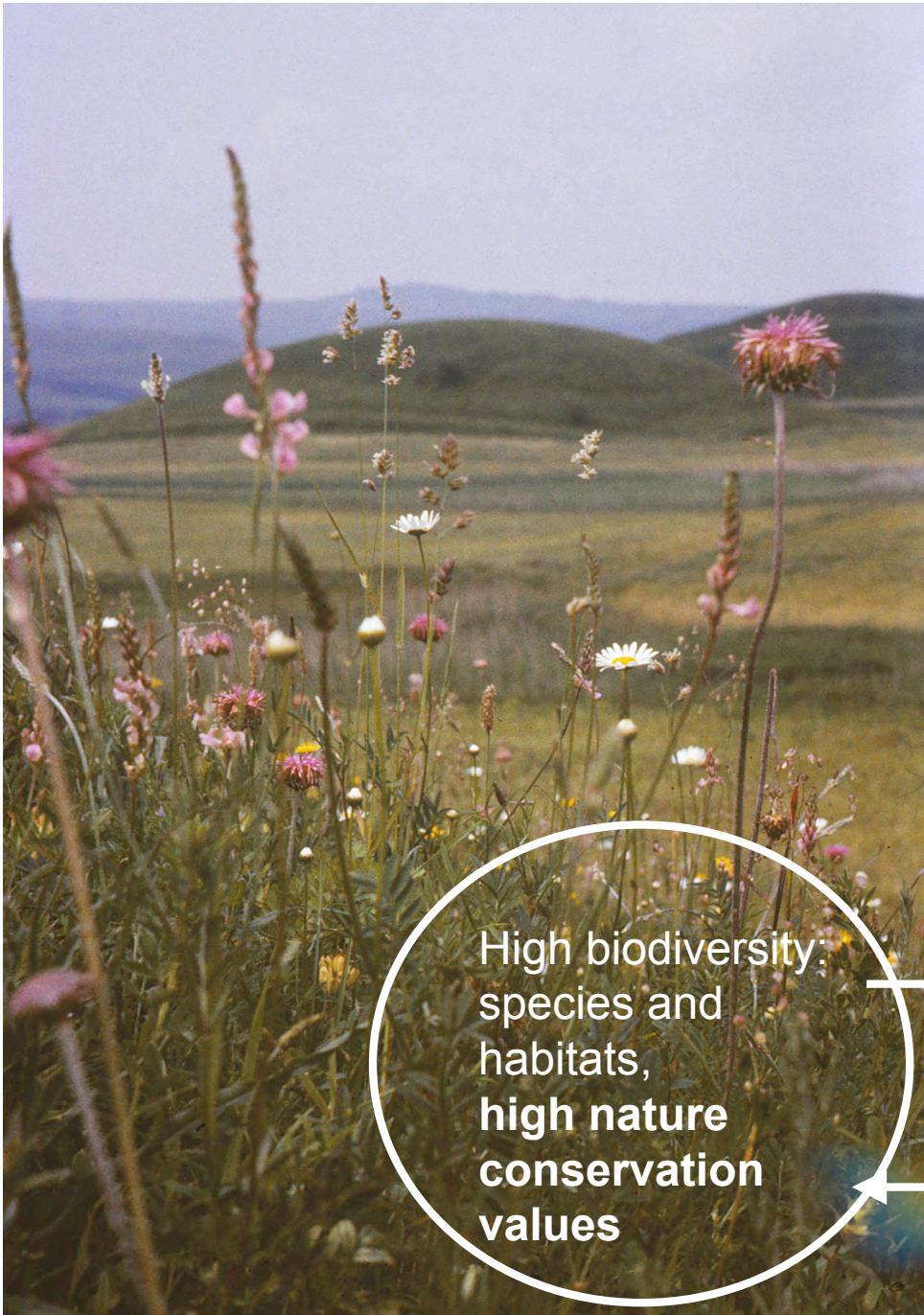


Geomorphological map of Carpathian Basin, part South-Eastern Transylvania

Grassland habitats in Southern Transylvania with importance for the Natura 2000 network

Habitat types

- 6210 *Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) – 5 plant communities ;
- 6240* Sub-pannonic steppic grasslands - 5 plant communities;
- [6250 * Pannonic loess steppic grasslands]
- 62C0 *Ponto-Sarmatic steppes (relicts)- 3 plant communities;
- 6440 Alluvial meadows of river valleys of the *Cnidion dubii* - 4 plant communities;
- 6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) – 3 plant communities;
- 6520 Mountain hay meadows – 3 plant communities;



What we can due ?

To use it - taking into account traditional practices with sustainability



Hay harvest in the Hârtibaciu valley (2009)



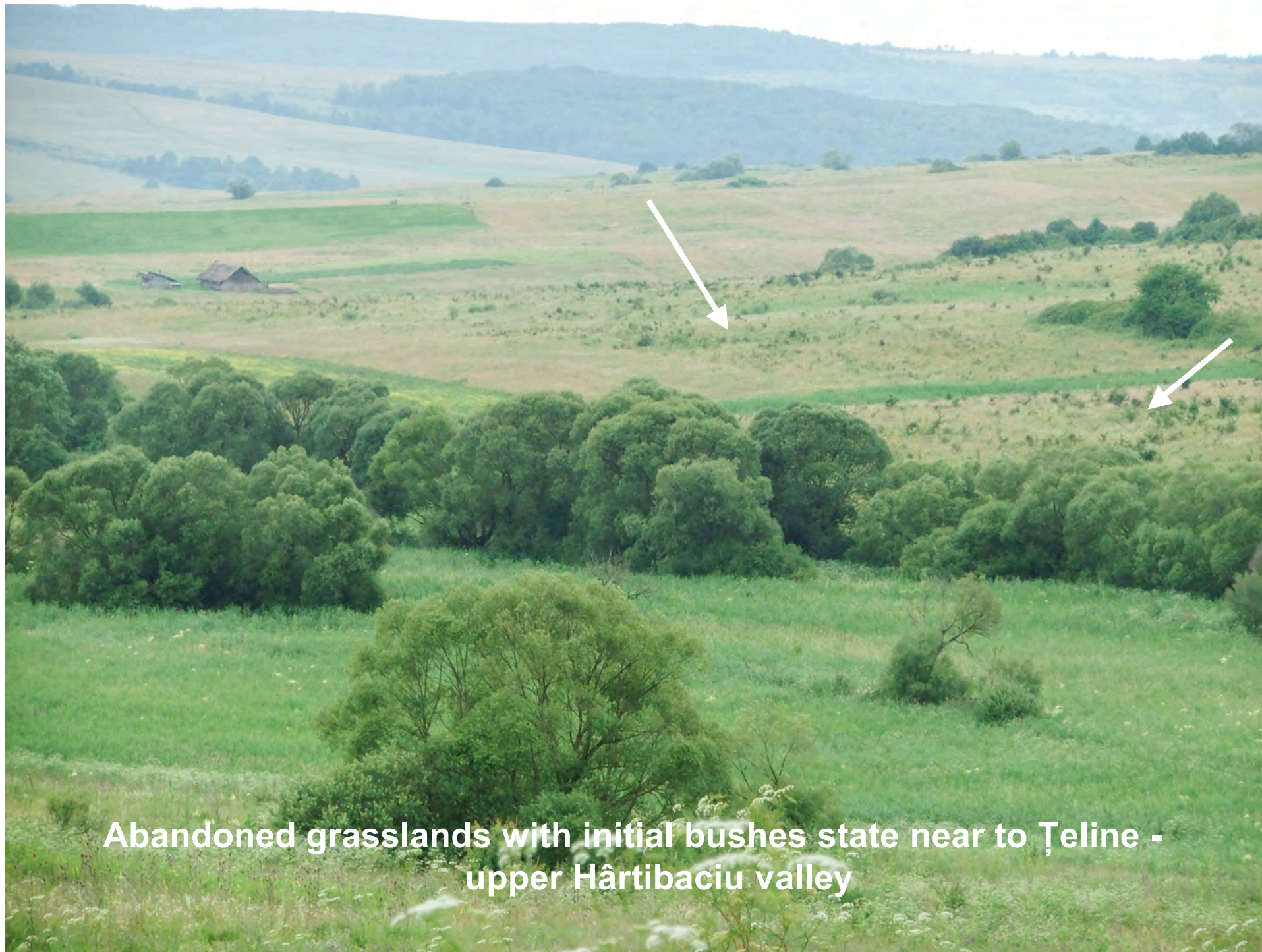
Community pasture at Altina



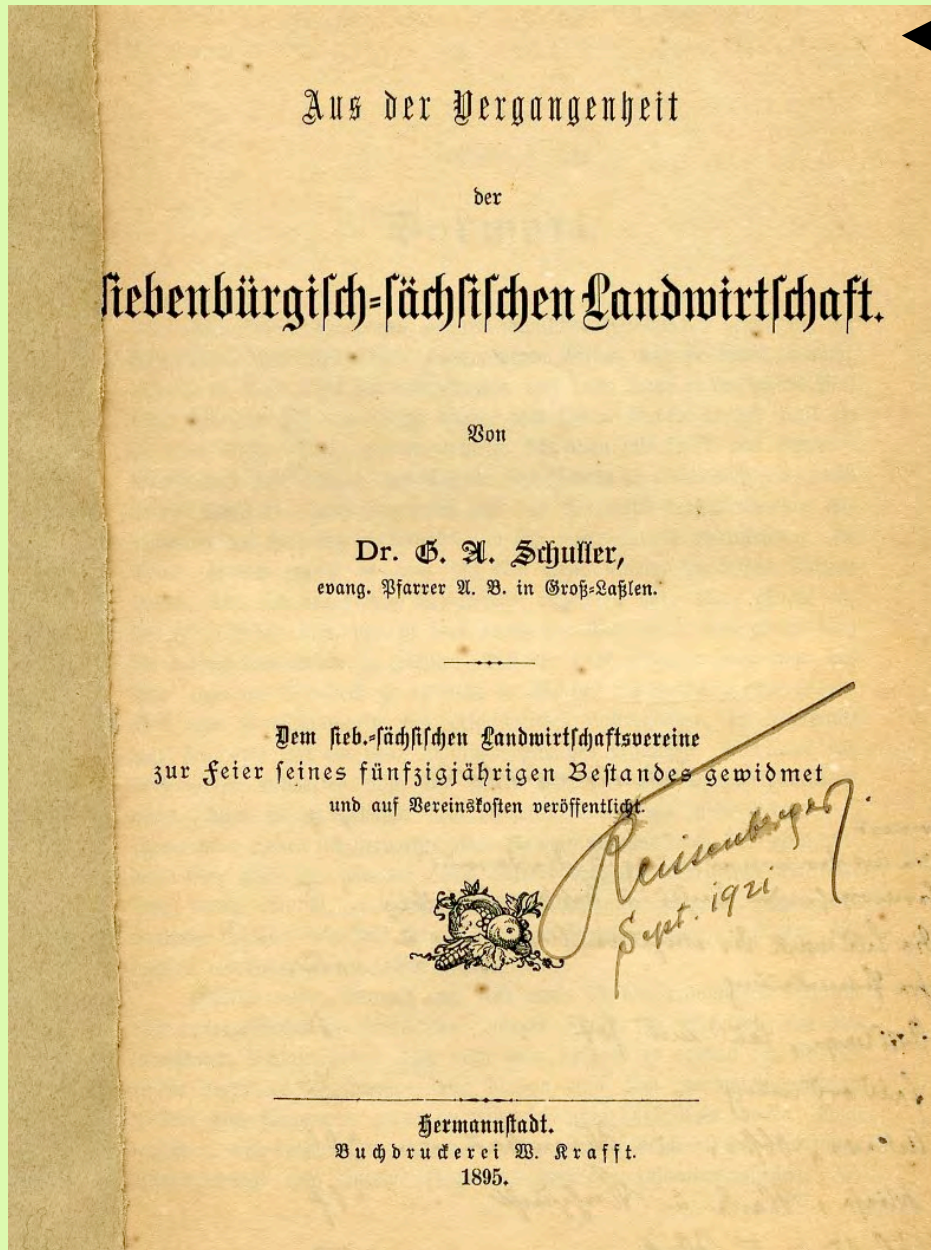
Sheep grazing in late autumn



Evening – return from the pasture

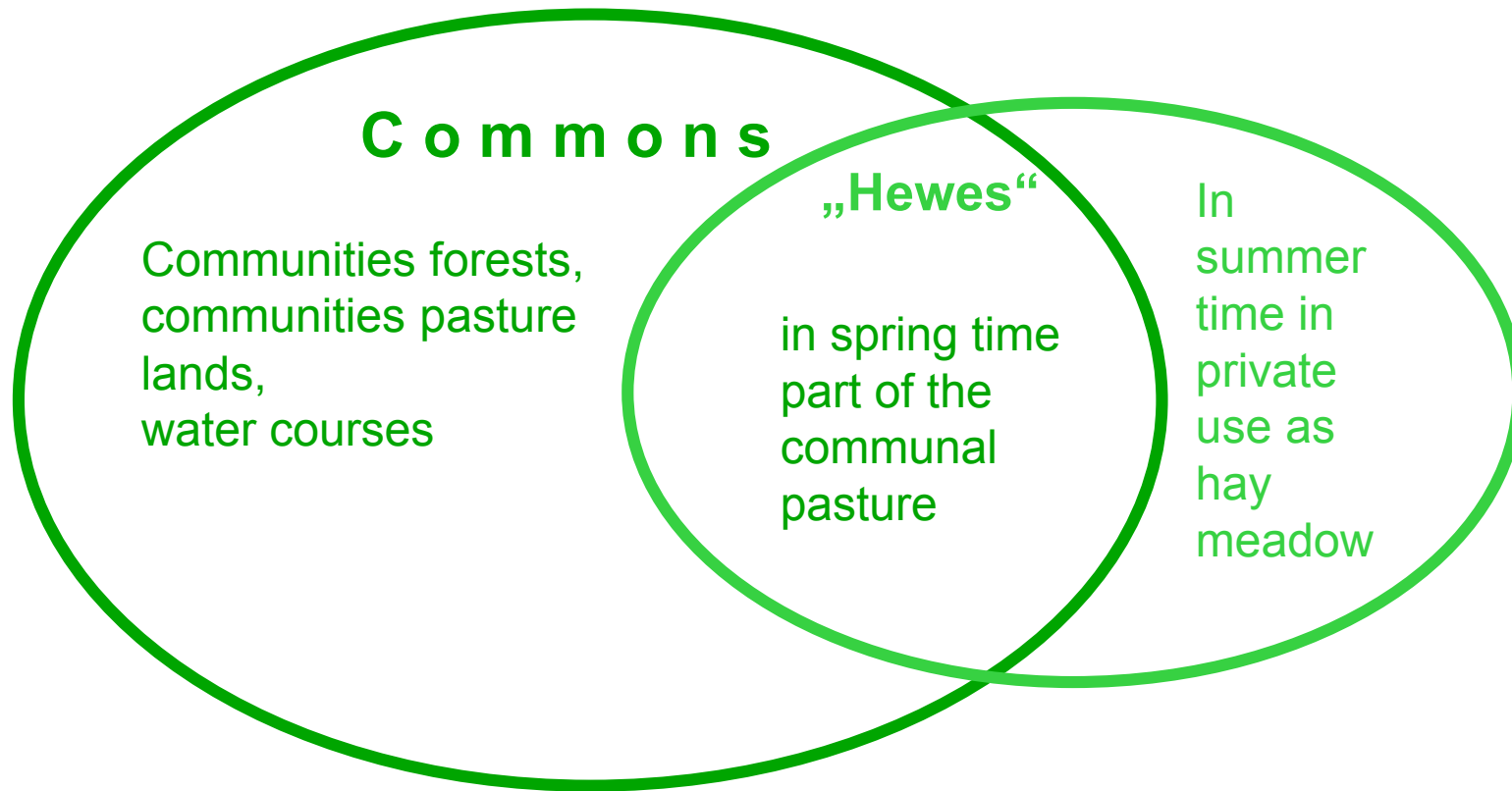


**Abandoned grasslands with initial bushes state near to Țeline -
upper Hârtibaciu valley**



← „From the past of the Transylvanian-Saxon agriculture“

For the Management of the grasslands (meadows and pasture lands) on a traditional way including sustainable use and in the same time conservation of biodiversity (habitats and species) in a historical landscape, it is needed to know how the grasslands were managed and used in the past!



13-14th century

P a s t u r e	H a y m e a d o w
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16th &
17th century

P a s t u r e	H a y m e a d o w
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Use of grasslands following old documents

Example:

- 18th century in Laslea 1178 acre arable land, 1188 acre meadows.
Later the situation changed in favour of arable lands
- 1682 acre arable land and 994 acre gardens and meadows; pastures was only the area of the commons;

The management of grasslands in saxon villages followed old practices brought from the Mosel and Rhine in the 12th century:

- Use as pasture until 1. Mai (later fixed on st. George day/24 april), after that time used as hay meadow by traditional mowing and up to 24th of August again as pasture; this remained usual until present;
- Meadows mowed twice of the vegetation period from 1 March to 1 Octobre (known up to the 13th century) - if long autumn after that time pasturing was allowed: this remained usual until present; in some area (Sighisoara, Rupea) only before St. George day /24 April and after St.Micheal /29 September use as pasture was allowed



Use of grasslands following old documents

Beginning of hay harvest relatively late: first Sunday after St. Margareta/
12 July (at that time the seeds were spreaded);

Later the St. Joans day (24 June) were fixed with some adaptations following
weather conditions;

**Apart from cleaning, special meadow culture like in Western Europe
with harrow works and irrigation practices was not usual in the area
of Saxon villages;**

**Pasturing was usual only on the commons (the community pasture) and with
obligation for all villagers;**

After harvesting the arable lands the stubbles pasture were also usual;

Considering the traditional, sustainable practices in the
Management plan of the Natura 2000 sites, we can conserve
the important habitats and use them in the same time



**Thank you for your attention !
Va multumim pentru atentie !**