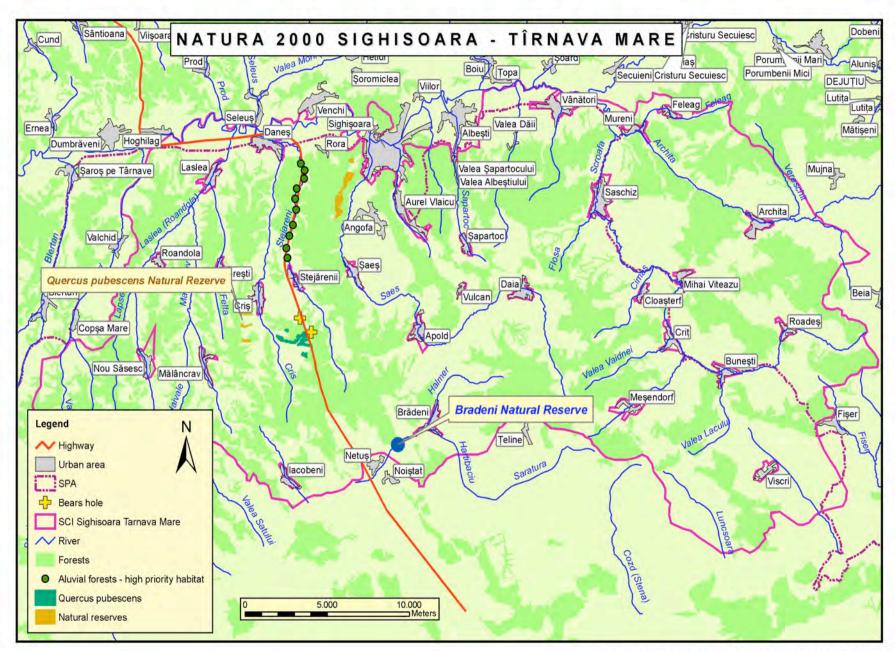
Conference on High Nature Value grasslands: securing the ecosystem services of European farming post 2013 7-9 September 2010, Sibiu

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

Erika Schneider-B. & Constantin Drăgulescu

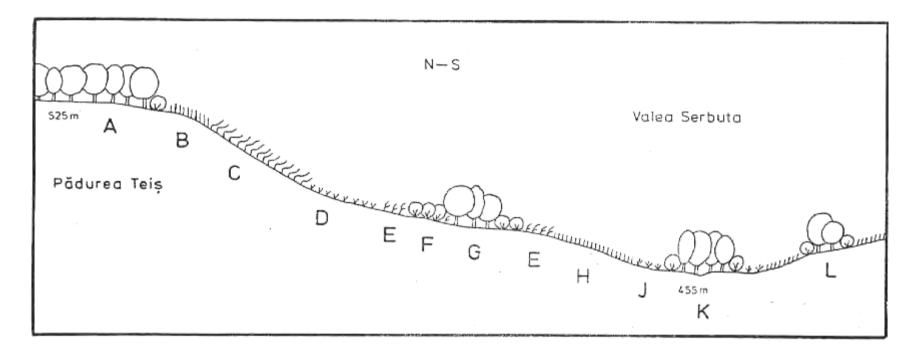


Author: environment analyst Calin Cengher LEPA Mures

The Southern Transylvanian Tableland (Podişul 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 Şerbuţa-Valley in Southern Transylvania



A: Oak-Hornbeam forest (Querco 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 tirsa (=stenophylla) and Salvia nutans in Southern exposition

Habitat structures are conditioned by:

- Macro- and microrelief

Edaphic and climate conditions

- exposition

- inclination

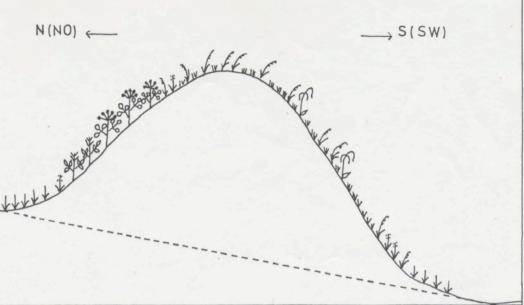
- related light conditions

- soils

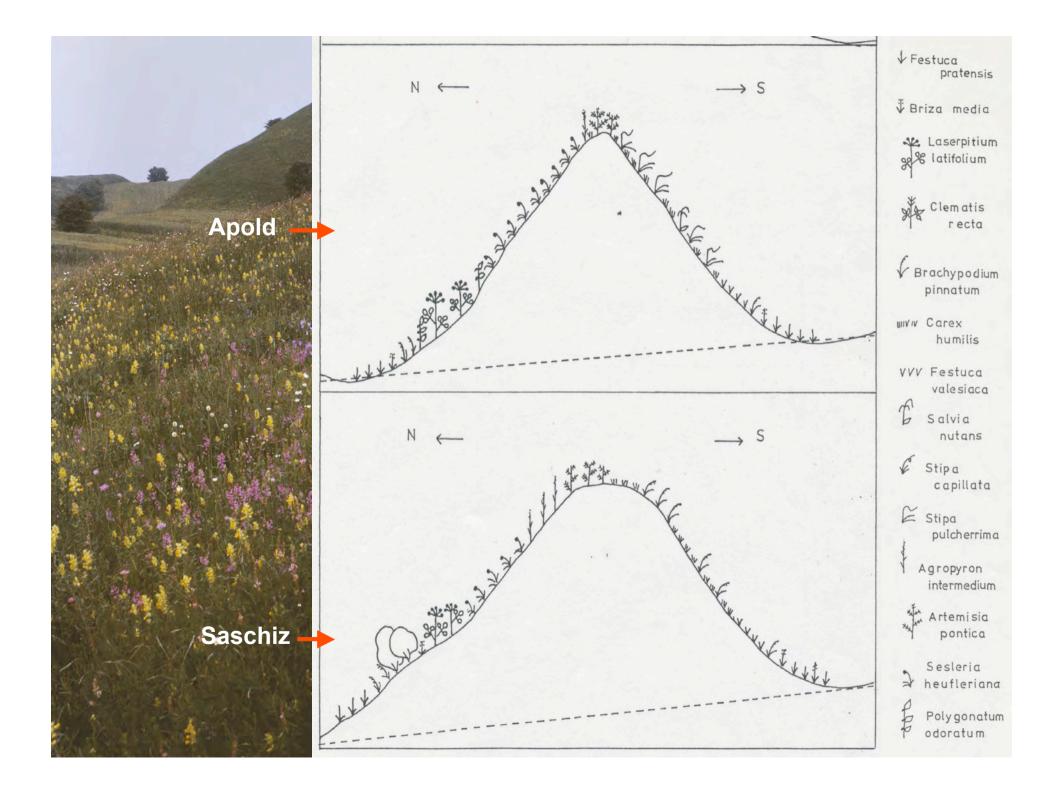
present and former land use

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





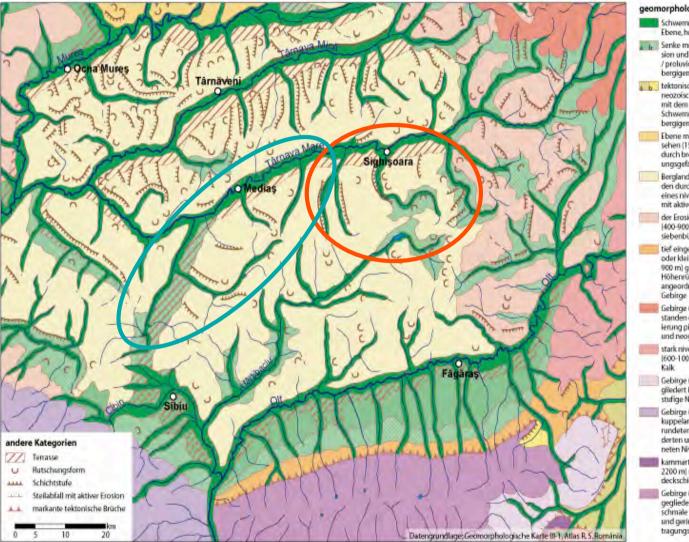
Vegetation on slumping hills between Noistat and Movile



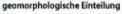




The Natura 2000 sites we are focussing on (SCI and SPA) cover a vast area of mainly grasslands / farmland (pastures and meadows)



Geomorphologische Karte des Karpatenbeckens - Teil südöstliches Siebenbürgen



- Schwemmebene, alluviale Ebene, holozăne Aue Senke mit differenzierter Ero-
- sion und Niederungscharakter / proluvio-alluvial (a) oder mit bergigem Aussehen (b)
- b tektonische Senken gefüllt mit neozoischen Sedimenten und mit dem Charakter einer Schwemmebene (a) oder mit bergigem Charakter (b)
- Ebene mit hügeligem Aussehen (150-450 m), gegliedert durch breite Täler mit rutschungsgefährdeten Hängen
- Bergland (400-700 m) enstanden durch starke Gliederung eines nivellierten Hochlandes mit aktiven Hängen
- der Erosion ausgesetzte Berge (400-900 m), rund um das siebenbürgische Becken
- tief eingeschnittene Berge oder kleines Gebirge (700-900 m) gegliedert in schmale. Höhenrücken, schwellenartig angeordnet am Rande der Gebirge
- Gebirge (800-1200 m) entstanden durch die Fragmentierung piroklastischer Plateaus und neogener Lavafelder
- stark nivelikertes Gebirge (600-1000 m), vorwiegend aus Kalk
- Gebirge (1200-1700 m) gegliedert in breite Rücken und stufige Nivellierungen
- Gebirge (1800-2200 m) mit kuppelartigen Formen, gerundeten Höhen sowie geglie derten und stufig angeordneten Nivellierungsflächen
- kammartige Gebirge (1800-2200 m) mit Resten einer Kalkdeckschicht
- Gebirge (2200-2500 m) stark gegliedert in Kämme und schmale Gräte mit Glazialrellef und geringen Resten von Abtragungs-/Nivellierungsflächen

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;

High biodiversity: species and habitats, high nature conservation values

Habitats are livelihood of farmers; flower rich hay, and good pastures

S DE TOTAL

What we can due ?

To use it - taking into acount traditional practices with sustainability



Community pasture at Altina





Abandoned grasslands with initial bushes state near to Ţeline upper Hârtibaciu valley Aus der Vergangenheit

der

siebenbürgisch=sächsischen Landwirtschaft.

Von

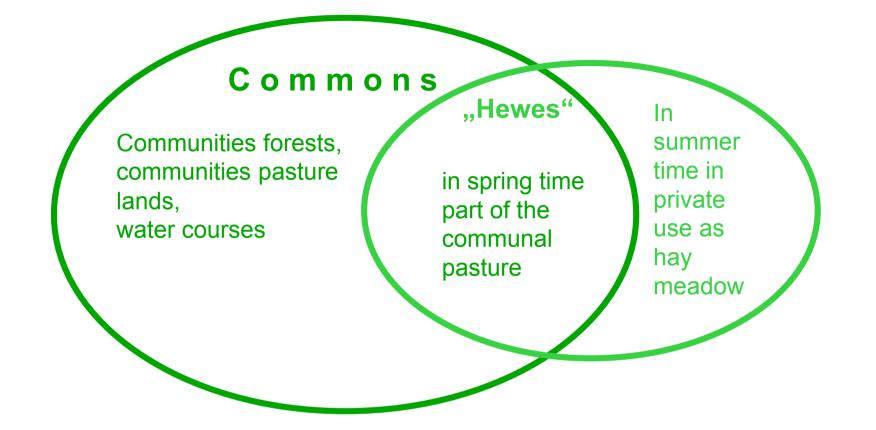
Dr. G. A. Schuller, evang. Bfarrer A. B. in Groß-Laßten.

Jem sieb.-sächsichen Landwirtschaftsvereine zur feier feines fünfzigjährigen Bestandes gewidmet und auf Bereinskosten veröffentlicht.

> Hermannstadt. Buchdruckerei W. Krafft. 1895.

"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	Pasture			Ha	a y	m	e a	d o w
16th& 17th century	Pasture	Нау	m	е	а	d	0	w

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 harwest 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 adaptions 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 harwesting 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 !