



European pastoralism and land abandonment: the experience of the PASTORAL project

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Picture from presentation by Veen, P. & Kabucis, I. (2004). *Semi-natural grasslands in central and eastern European countries: interim review, national mapping projects*, 3 March, Brussels.

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AVEC workshop
Capri: October 2004

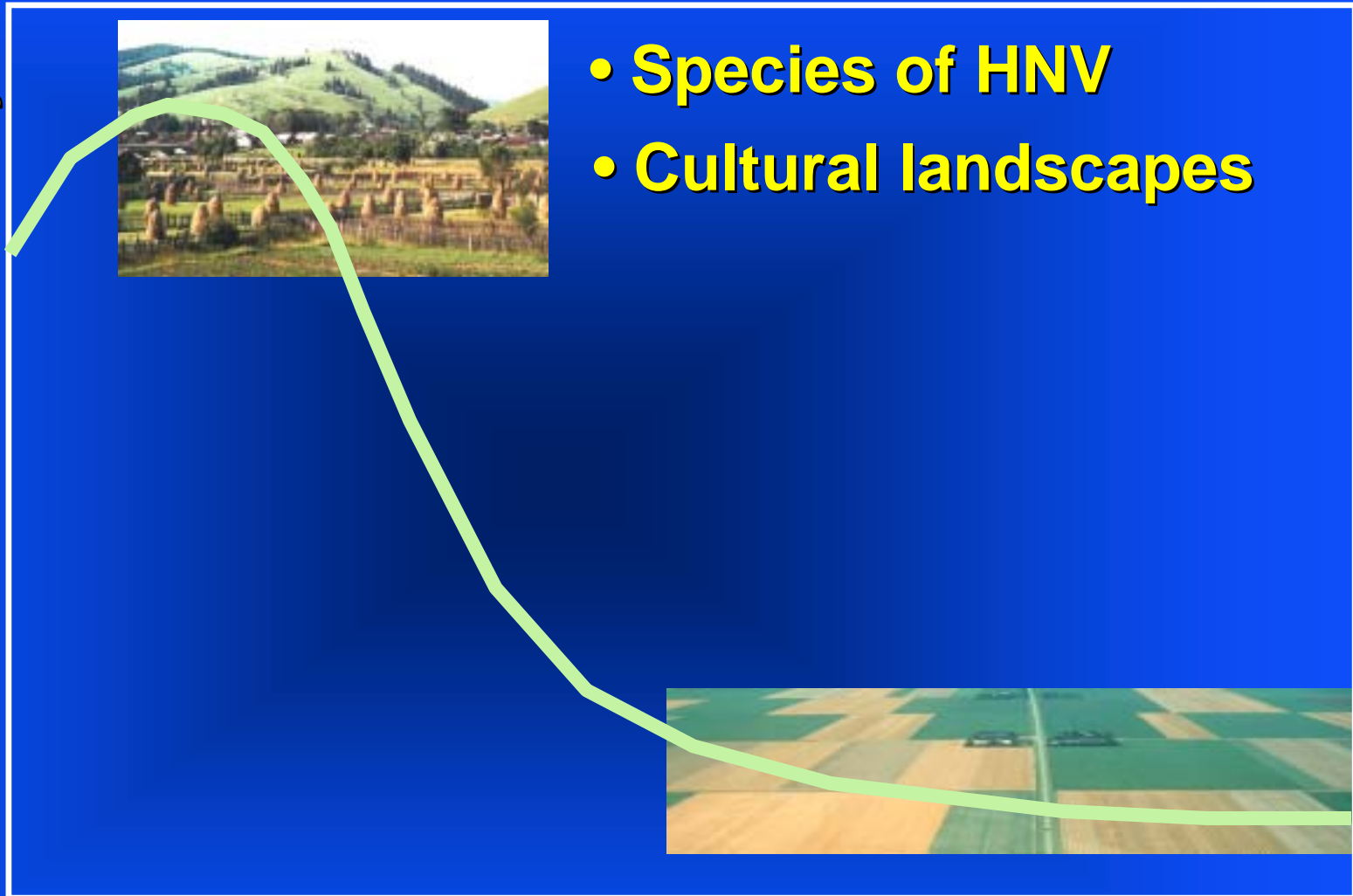


PASTORAL: the agricultural, socio-economic and ecological characteristics of high nature value pastoral systems in Europe



- **Scottish Agricultural College (UK)**
- **European Forum on Nature Conservation & Pastoralism**
- **Alterra (The Netherlands)**
- **Institute for European Environmental Policy (UK)**
- **Asociacion para el Analisis y Reforma de la Politica Agro-rural (Spain)**
- **Universidad Autonoma de Madrid (Spain)**
- **Escola Superior Agraria de Castelo Branco (Portugal)**
- **Coordination Paysanne Europeenne (Belgium)**





- Habitats of HNV
- Species of HNV
- Cultural landscapes

Intensity of agriculture



Typology of HNV farming systems

Livestock systems:

- in upland & mountain areas
- in Mediterranean regions
- in wooded pastures
- in temperate lowland regions

Arable and permanent crop systems:

- dryland cultivation in Mediterranean regions
- arable cultivation in temperate regions
- rice cultivation
- tree crops
- vineyards

Mixed systems:

- mixed Mediterranean cropping
- small-scale mixed farming



Four main meetings

- Soto del Real, Spain: *Extent and characteristics of extensive grazing systems*
- Moieciu de Sus, Romania: *Impact of scale and Accession on biodiversity value*
- Isle of Islay, Scotland: *Ecological principles and nature conservation value*
- La Crau, France: *Rural policies in Europe - delivering more for pastoralism?*



Each main meeting



- 35 - 40 delegates + local representatives
- 3 - 3.5 days in total
 - 1 - 1.5 days discussions in the field with shepherds, landowners and local experts
 - 2 - 2.5 days formal presentations, workshop sessions and discussions
- Overview report and articles on website
- Informed detailed focus of the next meeting



Amount of livestock forage and fodder from semi-natural vegetation

High



Examples of European HNV pastoral systems

Low

High

Amount of human influence on the location of the livestock





HNV pastoral systems are of high nature value because:



- **Grazing enhances structural diversity**

**Diversity of
types of
open habitats**

Dehesa

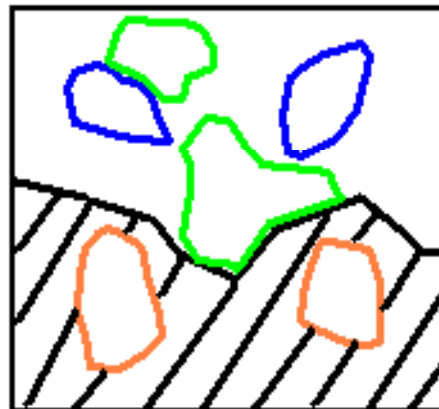


Very High

Moorland

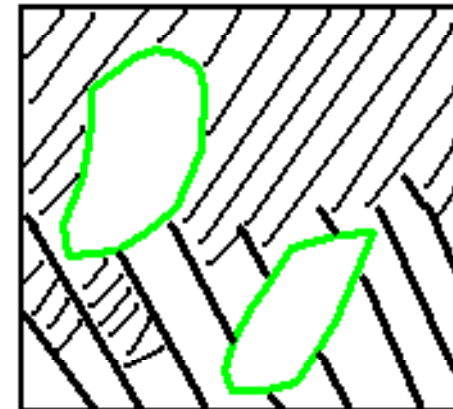


Alpine grassland



Low

Lameiros



Very Low

Diversity of
vegetation
structure

Dehesa



Very High

Moorland



Alpine grassland



Very High

Lameiros



High



HNV pastoral systems are of high nature value because:



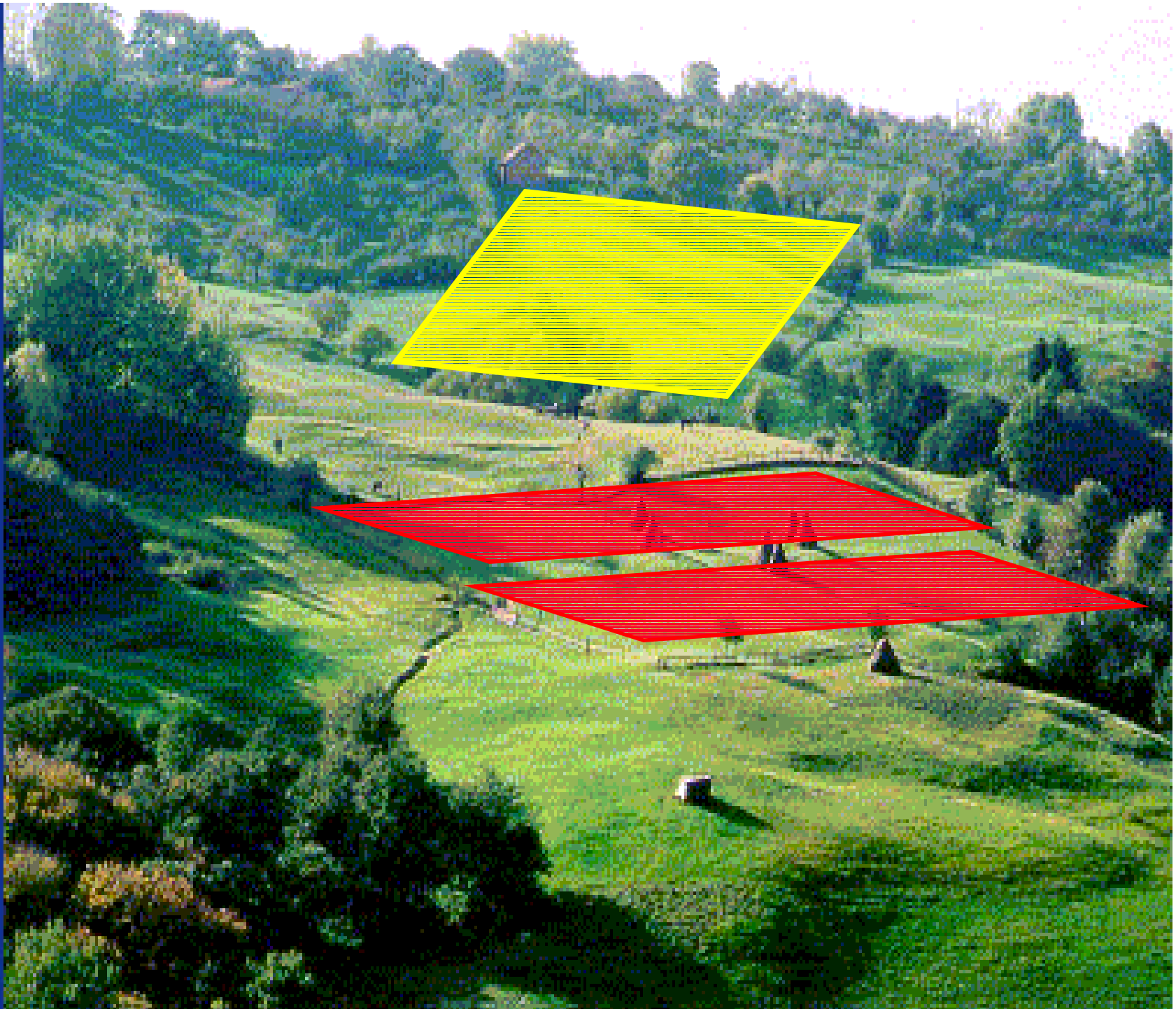
- **Grazing enhances structural diversity**
- **Practised at large enough scale to allow:**

Suitable conditions to be found at any time

AND

For variety of conditions to exist through year

100 years
Supporting the
land-based industries
1904 - 2004





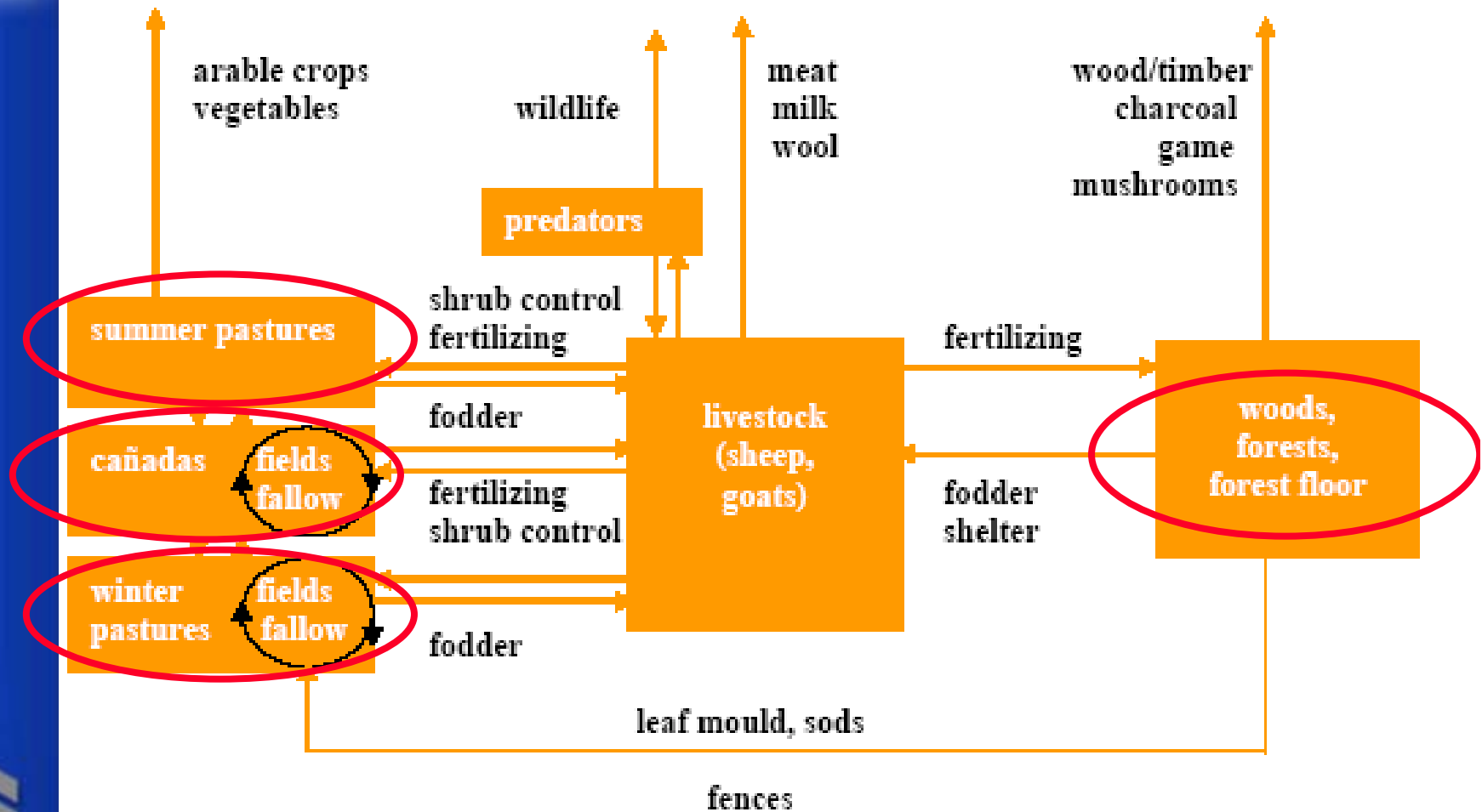
HNV pastoral systems are of ecological importance because:



- Longevity of systems allows ecological ‘predictability’ and ‘stability’
- They introduce spatial diversity (especially patchwork of habitats)
- They introduce temporal diversity (especially patchwork of management)
- Provide links between habitats/landscapes (close proximity or far apart)

Transhumance

amenity, biodiversity, historical information, abiotic regulation

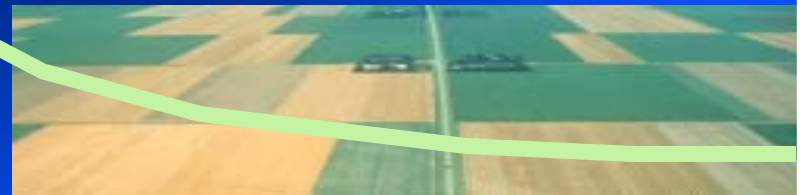


From: Pinto-Correia, T. & Voss, W. (2002) Multifunctionality in Mediterranean landscapes: past and future. In: Proceedings of the Frontis workshop on the future of European cultural landscapes, 135-164 . Wageningen, NL.

Pressures on HNV pastoral systems:



- Intensification of management practices
- Afforestation of grazing habitats
- Abandonment of management practices

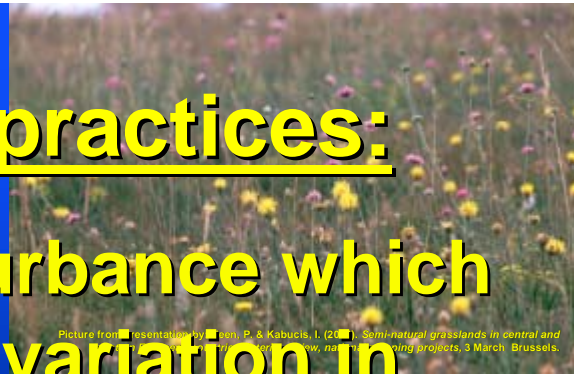


Intensity of agriculture



Abandonment of pastoral practices:

- Results in low levels of disturbance which reduces spatial and temporal variation in vegetation type and structure
- Reduces need for associated HNV habitats (e.g. hay meadows)
- Can result in intensification of use of other habitats (on the farm or linked to system)



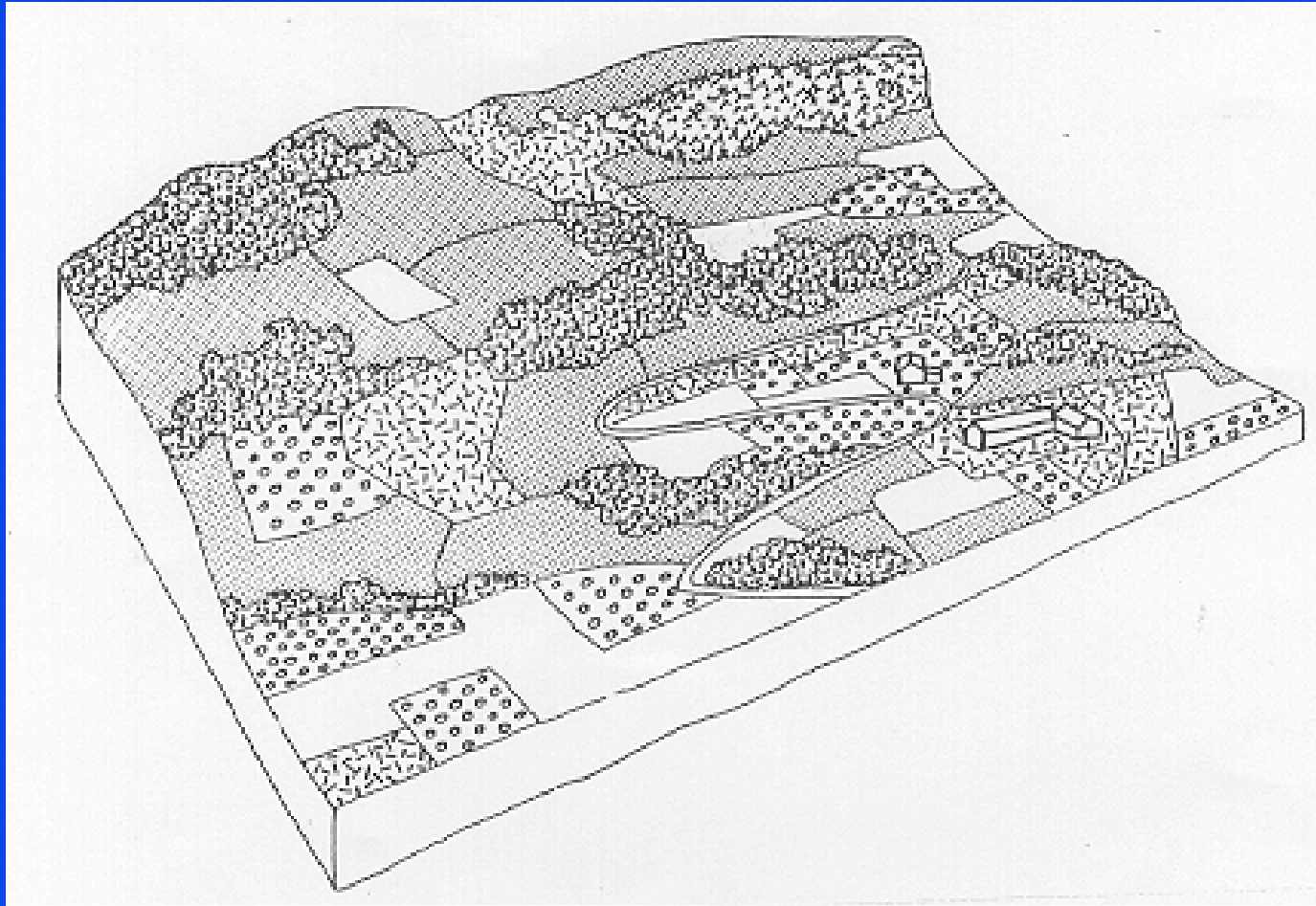
Picture from presentation by Tom, P. & Kabucis, I. (2011). Semi-natural grasslands in central and eastern Europe. In: 'Sustainable use of natural resources' project, 3 March, Brussels.

Pastoral practices needed:

- Natural grazing processes do not substitute for livestock associations
- Need to maintain intensity at correct level

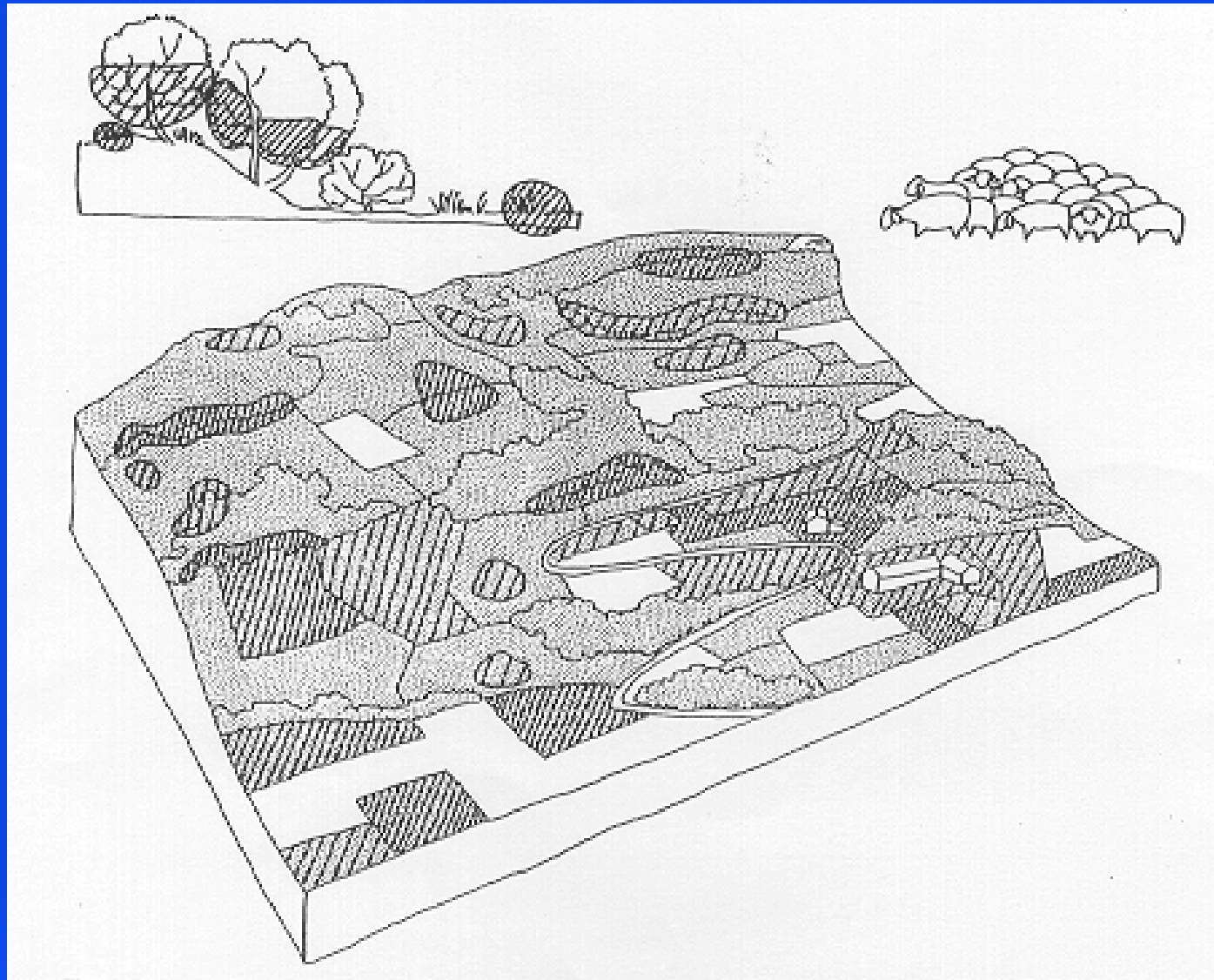


The land from the perspective of: vegetation type



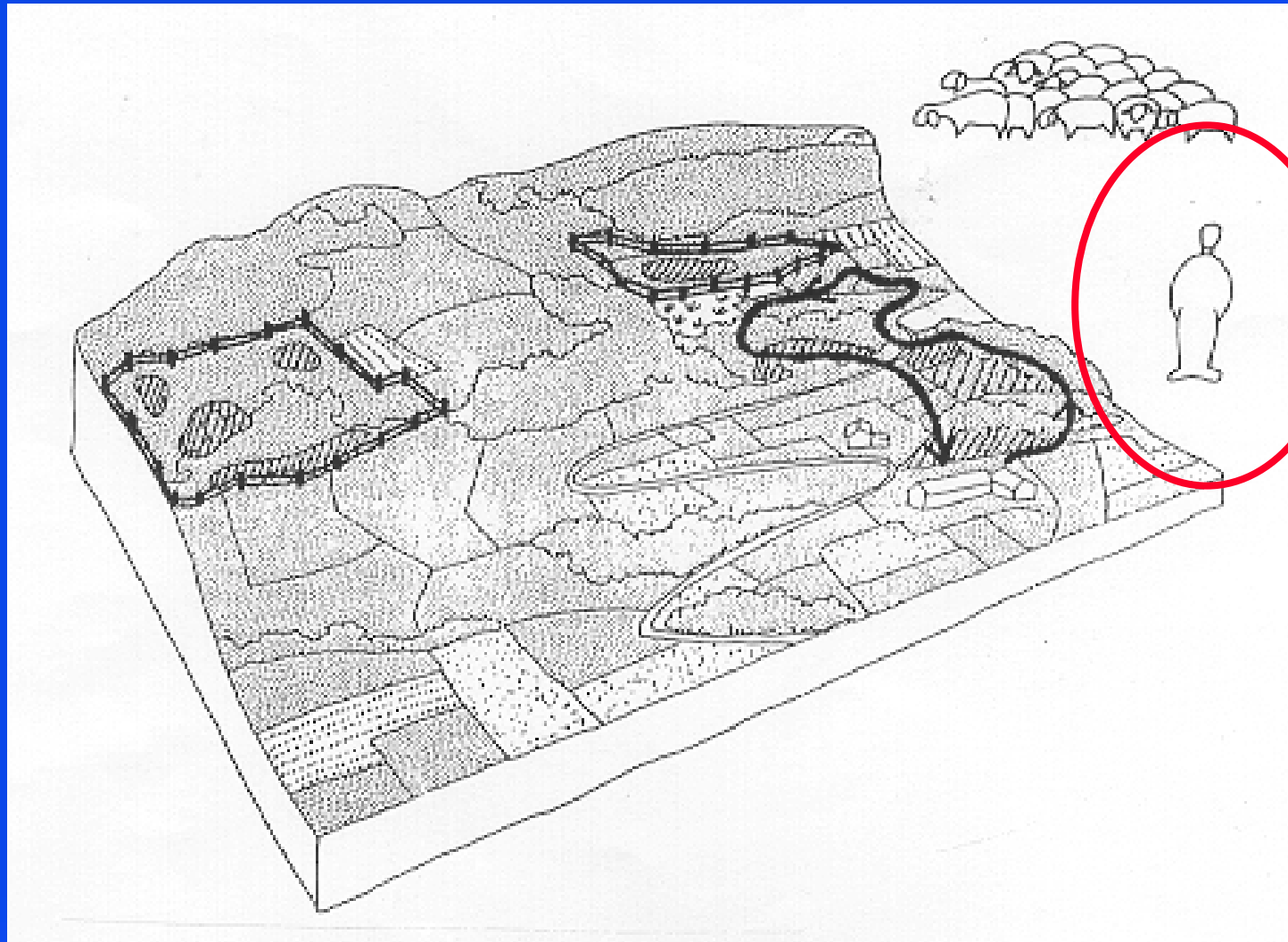
From: Hubert, B. (1994) *Pastoralisme et territoire: modelisation des pratiques d'utilisation. Cahiers Agricultures*, 3 9-22

The land from the perspective of: how it is used by animals



From: Hubert, B. (1994) Pastoralisme et territoire: modelisation des pratiques d'utilisation. *Cahiers Agricultures*, 3 9-22

The land from the perspective of: farm management strategies



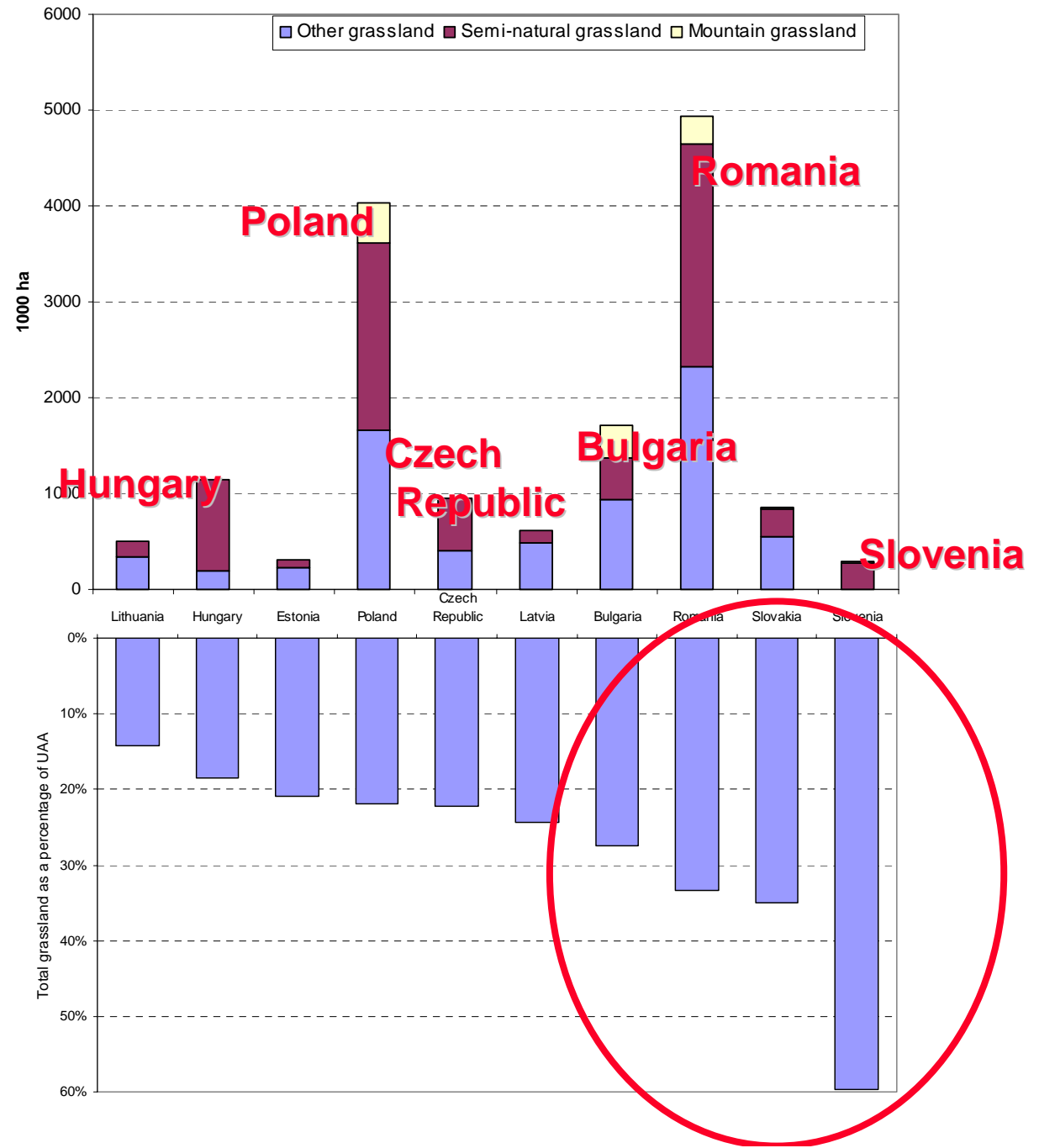
From: Hubert, B. (1994) Pastoralisme et territoire: modelisation des pratiques d'utilisation. *Cahiers Agricultures*, 3 9-22



Major issues

- Lack of awareness of importance of these systems for biodiversity conservation
- Mediterranean and Accession countries hold large areas under these systems







Major issues

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- Mediterranean and Accession countries hold large areas under these systems
- Abandonment is having major adverse biodiversity impacts



Abandonment in CEECs

- **Affects up to 30% of UAA but varies markedly between countries**
- **Mainly associated with fall in livestock numbers** (cattle fell by 40% and sheep by 60% 1989-1994)
- **HNV farmland affected disproportionately.** Estonia: 30% of all farmland is abandoned (but figure rises to 50% of permanent grassland and 60% of semi-natural grasslands)
- **If abandoned land not included in Agricultural Base Area set for each country then will be difficult to reinstate management (as will not qualify for support)**





Major issues

- Lack of awareness of importance of these systems for biodiversity conservation
- Mediterranean and Accession countries hold large areas under these systems
- Abandonment is having major adverse biodiversity impacts
- Transhumant and semi-subsistence shepherds and farmers miss the policy net
- Agri-environment is not sufficient to address these issues
- Social pressures are as important as CAP in contributing to decline of these systems



Picture from presentation by: Veen, P. & Kabacis, I. (2004). Semi-natural grasslands in central and eastern European countries: interim review, national mapping projects, 3 March, Brussels.





Gaps in knowledge

- Detailed understanding of how HNV systems function and link with biodiversity
- Ecological limits of tolerance and implications for system development
- Main actors and status with regard to eligibility for financial support
- Appreciation of social problems facing HNV shepherds and farmers
- Impact of policy change on high nature value farming systems
- Approaches to marketing high quality products from HNV systems





Policy implications



- System based policies are needed to help support multiple land-use and transhumance
- Member States need to define their pastoral systems, acknowledge their importance and identify their distribution
- EU-wide strategy to prevent abandonment of high nature value farmland is required urgently
- Southern, Central and Eastern European countries need additional support for high nature value farmland and systems



Urgent action required to ensure

- New regulations do not inadvertently accelerate the decline of pastoralism and its associated biodiversity
- New support measures for pastoralism are targeted both at the systems and at the areas where they survive
- Additional issues affecting the small-scale systems in Mediterranean and Accession countries are addressed before the systems are abandoned
- Identify and prioritise areas where actions have the most change of having an impact





Further information

PASTORAL project website:

<http://www1.sac.ac.uk/envsci/external/Pastoral/default.htm>



Video - overview of issues

Series of eight Information Notes

- 1: *An introduction to European pastoralism***
- 2: *The need for a typology of European pastoral systems***
- 3: *The nature of European pastoralism***
- 4: *Examples of European pastoral systems***
- 5: *Trends and threats to the viability of European pastoral systems***
- 6: *Potential policy approaches to support European pastoralism***
- 7: *Gaps in the understanding of European pastoralism***
- 8: *European pastoralism: farming with nature***



Further information

European Forum on Nature Conservation and Pastoralism (EFNCP) (<http://www.efncp.org>)

- Website & *La Cañada* newsletter
- Seminars and conferences

Transhumant (<http://www.alterra-research.nl>)

- *A review of the role of transhumance in mountain ecosystem processes and dynamics*

European Environment Agency (EEA)

- *HNV farmland: characteristics, trends and policy challenges* (<http://www.eea.eu.int>)
- *Agriculture and the environment in the EU Accession countries: the implications of applying the EU CAP* (<http://www.eea.eu.int>)

