



This series of eight Information Notes and accompanying video are intended to provide a brief introduction to some of the issues facing pastoralism in Europe today. They were produced as part of the output from the PASTORAL project, an EU-funded Concerted Action which considered the agricultural, socio-economic and ecological characteristics of high nature value pastoral systems in Europe.

The PASTORAL project was steered by a consortium consisting of the Scottish Agricultural College (UK), European Forum on Nature Conservation and Pastoralism, ALTERRA, (The Netherlands),

Institute for European Environmental Policy (UK), Asociacion para el Analisis y Reforma de la Politica Agrícola Rural (Spain), Universidad Autónoma de Madrid (Spain), Escola Superior Agraria de Castelo Branco (Portugal) and Coordination Paysanne Européenne (Belgium).

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Further detailed information on the PASTORAL project and European pastoralism can be found at: www.sac.ac.uk/envsci/external/Pastoral/default.htm

What is pastoralism

- The pastoral systems which fell within the focus of the project are generally characterised by the grazing of domestic livestock at low densities in large 'unenclosed'¹ areas overwhelmingly dominated by semi-natural vegetation. This semi-natural vegetation provides the vast majority of the livestock's forage requirements throughout the year.

The diversity of systems and generic characteristics

- There is a wide variety of pastoral systems practised in Europe today reflecting the climate, topographical conditions and cultural traditions that have shaped them. Figure 1 provides an indication of the range and types of systems which fell within the focus of the PASTORAL project². Although diverse, these systems share the following generic management characteristics:
 - Management practices are adapted to the seasonal cycles and the carrying capacity of the land
 - Stocking densities are low on semi-natural vegetation
 - A significant proportion of semi-natural vegetation is utilised to provide forage (and also fodder in many cases)
 - Limited inputs of fertilisers and agrochemicals are applied
 - Slow-maturing traditional breeds adapted to the local environment are utilised
 - They often involve significant amounts of human intervention (e.g. shepherding)

¹ In some areas, often where animals are not herded or shepherded on a daily basis, there may be fences but in general such pastures and grazing areas are so large that they are not constantly restricting the animals movement or grazing behaviour

² PASTORAL Information Notes 4 and 8 provide more detailed examples of some of these specific systems

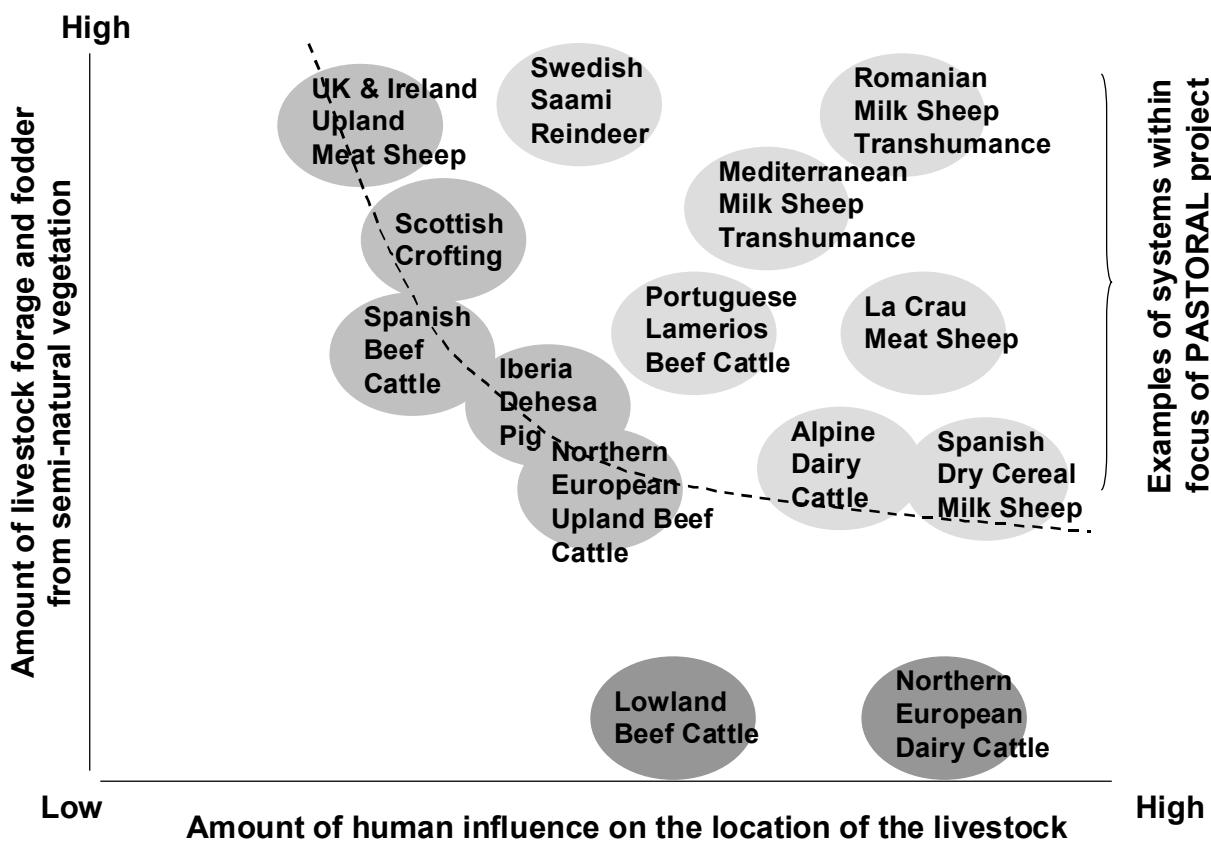


Figure 1: Examples of pastoral systems falling within the focus of the PASTORAL project

History of pastoralism and current extent

- Pastoralism in Europe has a long history, stretching back as far as 10 000 years in some regions. Much of Europe's wildlife has developed alongside pastoralism and many habitats and species are now dependent on its continuation. Certain grazing practices even mimic the natural grazing pattern similar to those of large herds of wild grazers that used to roam Europe in the long distant past until they were replaced by domestic livestock.
- The remains of Roman sheep barns can be seen in La Crau in south east France indicating a continuity of sheep grazing on this pseudo-steppe habitat stretching back over 2000 years. The alpine grasslands of Romania have been grazed by domestic livestock for at least 800 years.
- In '*The Nature of Farming*'³, a study of nine European countries in the mid-1990s, it was estimated that the area of land under grazing management may exceed 30 million hectares. In the Iberian peninsula alone, there are over 3 million hectares of dehesas/montados or wood pastures. In central and eastern Europe, nearly one-third, or 7 million hectares, of the Carpathian Mountains are covered by open semi-natural grassland habitats created and maintained by traditional shepherding systems⁴.

³ Beaufoy, G., Baldock, D. & Clark, J. (1995) *The Nature of Farming – Low Intensity Farming Systems in Nine European Countries*. IEEP, London.

⁴ Webster, R., Holt, S. & Avis, C. (2001) *The status of the Carpathians – a report developed as part of The Carpathian Ecoregion Initiative*. WWF, Vienna.

Why is pastoralism so important for the conservation of Europe's wildlife?

- Pastoral systems are high in nature value because pastoralism has created and maintains vast areas of high nature value semi-natural habitats including alpine grasslands, heathland, acid, neutral and calcareous grasslands, wood pastures, hay meadows and moorland.
- Within these habitats, pastoral practices such as low intensity grazing create diversity in the structure and composition of vegetation, providing niches for a wide range of species to exist. Because pastoralism is practised over large areas, and maintains a range of spatial and temporal niches, semi-natural habitats can accommodate the contrasting needs of different species⁵.

The central role of pastoralism in conserving European nature

- Pastoral farming systems that are still well integrated with the environment are therefore fundamental to the conservation of a large proportion of Europe's countryside, especially many of the habitats and landscapes regarded as being of high nature value.
- The European Commission's Biodiversity Action Plan for Agriculture lists supporting extensive methods of production, in particular in the livestock farming sector as a priority and highlights that that the '*maintenance of the diversity of flora in semi-natural grasslands is thanks to pasturage*'⁶.
- Understanding the ecological interactions between grazing livestock (and associated management practices) and the ecology of pastoral habitats at the large scale can be used to help manage protected areas. Nature conservation organisations, particularly in areas of north-western Europe where only fragments of semi-natural grasslands remain, are increasingly recognising the importance of using domestic livestock to maintain valuable remnants of habitat.

Pastoralism's role in 21st century agriculture and rural areas in Europe

- Although traditional and practised for many hundreds and even thousands of years, pastoralism still has an important role to play in 21st century livestock production in Europe. Not least because there is much more to pastoralism than livestock production and the maintenance of valuable wildlife habitats. Pastoralism is potentially environmentally sustainable and delivers many social benefits even maintaining cultures in many areas of Europe. Indeed, it fulfils the multi-functional principles of the European Model of Agriculture:

*'a sustainable efficient farming sector that uses hygienic, environmentally friendly production methods and gives consumers the quality products that they desire; a farming sector that serves rural communities, reflecting their rich tradition and diversity, and whose role is not only to produce food but also to guarantee the survival of the countryside as a place to live and work, and as an environment in itself'*⁷

⁵ PASTORAL Information Note 3 provides an overview of how the characteristics of pastoral systems combine to create high nature value

⁶ http://biodiversitychm.eea.eu.int/convention/cbd_ec/strategy/agri/ENV-2000-681-EN-02-02-AGRI.pdf

⁷ From DG Agriculture's website: http://europa.eu.int/comm/agriculture/faq/q1/index_en.htm

A total of eight Information Notes have been produced from the PASTORAL project:

- 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*

Many of the points in these Information Notes are illustrated by examples taken from the location of the four main workshops held during the course of the project, Sierra de Guadarrama Mountains (Spain), Transylvania (Romanian Carpathians), Isle of Islay (Scotland) and the plain of La Crau (south-east France).

These Information Notes were compiled by Sally Huband (the dedicated officer employed by SAC on the PASTORAL project) with additional input from the other members of the project steering group: Davy McCracken and Gwyn Jones (SAC), Eric Bignal (EFNCP), Berien Elbersen (ALTERRA), David Baldock and Harriet Bennett (IEEP), Guy Beaufoy (Spain), Begoña Peco (UAM), Luis Pinto de Andrade (ESA-CB) and Gerard Choplin, Isabel Bermejo and Jesús Garzón (CPE). The project meetings enabled us to consider and discuss the future of pastoral systems with many colleagues drawn from our own institutes and elsewhere throughout Europe, and we offer our thanks to them for their useful contributions towards the development of many of the views presented here.