

Module 1.

What is transhumance

Training units

1. Different ways to carry out transhumance
2. Importance of transhumance
3. Looking backwards

For the TRANSFARM project, we define transhumance as a seasonal, long-distance **movement of livestock**. If you are practicing transhumance, planning to do so, or are interested in transhumance, your practice or interest is part of European natural and cultural heritage! This training module provides insight into different ways of practicing transhumance in a selection of European countries. Module 1 addresses different ways to carry out transhumance, the importance of transhumance, and its history.

1. Different ways to carry out transhumance

Mobility

Mobility is a key issue of transhumance. The movement starts at a farm where the livestock commonly stays during winter either in stables or outside. In spring or summer, it moves to pastures at a distance from the farm. In autumn or winter, the livestock returns to the farm. Depending on the distance between the farm and the pastures, the duration of the movement varies. The Norwegian dairymaid **Katharina Sparstad** needs about 2.5 hours to walk the livestock to the summer pastures. The Greek farmer **Rania Dimou** needs about 6 hours. Some practitioners are continuously moving their livestock throughout part of or the whole grazing season. For example, the French farmer Pierre Pujos moves his livestock within 3 weeks from his farm in the cereal-growing plain of **south-west France to the Pyrenees**.



The farm owned by the Slovakian **Salaš Turček Agrotrade Group** continuously moves its livestock among pastures throughout the whole grazing season. With the introduction of modern modes of transport, the number of livestock moving on foot has declined. Transporting the livestock with a van or trailer saves time and reduces the danger of accidents; however, it also causes expenses, for renting vehicles and paying fuel. The Greek farmer **Demetrios Tsatsos** moves his flock to the mountains with vehicles and on foot when he returns to his farm. Thereby, he reduces expenses. The **Summary Report** and the **National Reports** provide more information about the large variety of movement patterns.

Livestock

The most common types of livestock for transhumance are sheep, goats, and cattle. However, other types of livestock are used as well. For example, horses graze in **Hungarian national parks**, and donkeys transport **newborn lambs in Italy**. Many transhumance practitioners use traditional local or regional breeds due to their specific qualities. For instance, the Taronnais **sheep breed is robust**. The traditional Wallachian sheep breed is hardy and easily moves in uneven terrain, while the French Lacaune sheep produces more milk and can be **milked by milking machines**. Thus, the breed and the type, amount, and quality of (the) product(s) a practitioner can deliver are linked closely. The decision for a specific product or a change in product may result in a change of breeds.

For example, the Greek farmer **Demetrios Tsatsos** who delivers milk to the milk processing industry plans to exchange his local sheep and goat breeds with more productive breeds. The Norwegian farmer **Simen Løken** wants to try processing part of the cow milk he produces. Therefore, he may increase the heads of the traditional Dola Cattle whose milk has good qualities for cheese production. The number of heads of livestock involved in transhumance varies strongly. Some practitioners keep a few animals while others have several thousands. The Norwegian dairymaid **Sina Joten Søndmør** has 3 milking cows and some young goats for company. The Greek farmer **Ioannis Anthoulis** has 3000 sheep, 50 goats, and 200 heads of cattle.



Newborn lambs inside the bags.
Photo by Marianna Fabbrioli



The barn. Photo by Sina Joten Søndmør

Vertical, horizontal, and urban

Basically, transhumance can be either vertical or horizontal. Vertical transhumance means that livestock moves or is transported between lowland and upland areas. Usually, the livestock stays in the uplands or mountains during summer. The higher altitudes experience harsher climatic conditions and provide pastures only during summer. However, the livestock of the Austrian farmer **Hans Küng**, stays in the mountains during winter and summer, while it grazes lower altitudes during spring and autumn. Horizontal transhumance means that livestock movement occurs without substantial changes in altitude. The Slovakian farmer **Mária Iván Tamáš** practises such a kind of transhumance with his goat's herd.



Animals grazing the mountains. Photo by Ioannis Dekolis



Pastures in the valley of the Turňa Creek surrounded by the Silica Plateau. Photo by Martina Slámová



Pasture at the Saint-Philippe de Meudon ecological campus. Photo by Julie Martin

Urban transhumance makes use of grazing resources in urban and peri-urban areas. The French association [Bergeries en ville](#) practises urban transhumance in the Parisian agglomeration. Its livestock grazes, for example, public parks, lawns, and fallow land. Categorising transhumance into vertical, horizontal, and urban helps to better grasp the variety of practices. However, in real life practices may fit into more than one category. For example, the Spanish cooperative [Los Apisquillos](#) moves its livestock among pastures in the vicinity of its farm in the north of Madrid. Since the livestock does not cover any significant altitude, the movement is horizontal. However, the cooperative also moves to Casa de Campo Park in Madrid. This movement covers a significant altitude – vertical transhumance – and the cooperative makes use of urban grazing resources – urban transhumance.

Presence of humans

To be considered as transhumance in the TRANSFARM project, livestock must be accompanied by people. However, the meaning of accompanied by people can encompass a range of practices. A herder may stay with the livestock literally all the time. For example, the Slovakian [Farm Milko Ltd.](#) has a full-time herder. [Ioannis Anthoulis](#) large flock of animals is always under the strict supervision of herders. Continuous movement or the risk of predator attacks may make such a permanent supervision necessary. Livestock can be under supervision for only part of the time. For example, [Kathrin Aslakby's](#) goats graze the mountain pastures without being accompanied by a herder. Kathrin Aslakby milks the goats at the seasonal farm, processes the milk, and takes care of the animals. Finally, a herder may only accompany the livestock when it is moved among the fenced pastures. For the TRANSFARM project, this stay together with the livestock is too short to be considered as accompanied by people. Nevertheless, we have included case studies where herders only stay for a short time with the livestock; for example, in the case of [grazing national parks in Hungary](#) and [grazing of dykes in Germany](#). These case studies highlight that a variety of practices occur and that what exactly is considered transhumance is a question of definition.



Summer pastures in the Hautes-Pyrénées. Photo by Pierre Pujos.



A flock of sheep with guard dogs and a shepherd talking with citizens of Madrid. Photo by Pablo Resco.

2. The importance of transhumance

Goods and services

Transhumance provides a range of goods and services. Products such as milk and meat can be consumed directly, sold for further processing, or processed by a practitioner. For example, the Greek farmer **Ioannis Anthoulis** sells milk to the processing industry and processes it into cheese. Products such as fur and wool always require processing. The **French Maison de la Transhumance** cooperates with factories in Italy and Germany that process sheep wool into hiking clothes. Wool has been an important product in the past. However, it lost value. **The Fact Sheet** about sheep wool provides more information about wool and its potential usages. Besides producing food, transhumance preserves biodiverse and attractive landscapes.

For example, **Mária Iván Tamáš** goats help maintaining the landscape of a Slovakian national park and its protected plant species. The grazing of **Hungarian national parks** with autochthone breeds serves the protection of biodiverse grasslands and the preservation of genetic diversity of traditional breeds. A specific service of transhumance is fire prevention. Livestock grazing reduces the amount of woody plant material which means less fuel available for potential wildfires. Finally, transhumance is rich in traditional knowledge about how to use local resources. The Norwegian dairymaid **Katharina Sparstad** is especially concerned with keeping this knowledge alive and communicating it to, for example, school children.



The dairymaid. Photo by private



Goat grazing reduces shrubs. Photo by Oliver Post



Educational activities for schools. Photo by Patrick Fabre

Practitioners' reasons to start and continue transhumance

The reasons why practitioners start and continue transhumance are manifold, and a practitioner may have several reasons. Economy is one reason to practice transhumance as, for example, for the Greek farmer **Ioannes Dekolis**. The French farmer **Pierre Pujos** can feed his herd without using his or the summer pasture's resources during his three week's movement. Practitioners may get income from sales of products and services, support schemes, or salary. High prices for pastures close to the farm can be another economic motivation for practicing transhumance. For example, the German farmer **Herbert Fleck** grazes a considerable part of his young cattle at the **Adlegg Foundation's pastures**. High lease prices and shortage of land in his region make this cooperation necessary. Transhumance requires a deep understanding of natural processes.

Practitioners can be motivated by the fact that their way of producing food is close to nature and makes use of local and regional resources. Their practice maintains traditions and 'fits' the landscape. For example, the Norwegian dairymaid **Kathrin Aslakby** is concerned with how she can use local resources and combine tradition and innovation in her practice. Shaping the transhumance landscape including its biodiversity motivates practitioners as well. Transhumance is a way of living. Although transhumance is hard work, the fact that practitioners consider it to be a good way of living may motivate them. Not least, educating practitioners is a reason for practicing transhumance. For example, the **Domaine du Merle** is a centre for training shepherds. Check the other **Case studies** for more information about why practitioners decided for practicing transhumance.



Grazing on the alluvium and adjacent slopes contributes to the preservation of the character of the Turna Creek valley. Photo by Martina Slámová



The seasonal farm and its surrounding landscape. Photo by Silje Søndmør



The summer farm Olestølen and the mountain landscape. Photo by Kerstin Potthoff

3. Looking backwards

The beginning

Archaeological evidence and historical documents give insight into when transhumance was first practiced in different parts of Europe. Early occurrences of transhumance vary throughout Europe. In some areas, transhumance seems to have evolved with the introduction of livestock in the Neolithic Era. For example, the existence of a form of transhumance in the Southern French Alps was documented by archaeological findings for **about 5000 BC**. Sheep remains in the highlands of the Southern Pyrenees, approximately 7300 years old, also provide evidence for the presence of early Neolithic humans. In Norway, seasonal farming has been documented for the Iron Age (500 BC – 1050 AD) but may have been established earlier. In Slovakia, transhumance was introduced with the Wallachian colonization as late as the 1200s. We can't ask former farmers about where they got their knowledge about transhumance or their reasons for practicing it. Maybe moving animals among pastures and to herd them was their 'natural' way of practicing livestock husbandry. Maybe the pastures close to the farm did not cover the demands of the livestock throughout the whole year. Maybe some pastures could not be used throughout the whole year. Maybe livestock needed continuous supervision due to the risk of predator attacks.

Development trends

Throughout Europe's history the extent of transhumance has experienced ups and downs. The following examples of periods of growth show that their timing could vary among countries. In Greece, extensive rangelands were created, and transhumance developed during the Roman period (146 – 330 AD) and the Middle Ages (334 –1453 AD).



Hilly mountainous pastoral landscape and the farm Salaš Turček. Photo by Martina Slámová

Merino sheep husbandry in Spain had its greatest extent during the late Middel Ages and the beginning of the Modern Era (Middel Ages: 410 – 1492 AD, Modern Era: 1492 – 1814). In Hungary, transhumance expanded in the 17th century. In France, sheep transhumance reached its peak in the beginning of the 19th century. Periods of decline also varied among countries in terms of timing. However, the decline of transhumance since the second half of the 20th century has occurred in all countries, despite a recent interest in practicing transhumance in some countries. The reasons for all these developments are complex and comprise such different issues as broad scale changes in national, European and even global economy, technological development and societal changes. Political decisions about how to modernise agriculture are important also drivers. For example, increasing efficiency in agricultural production through higher-productive pastures and concentrated feed has reduced dependence on extensive rangelands. Highly productive breeds may not even be able to cover their requirements by grazing these rangelands.



The winter farm. Photo by Rania Dimou



Rangelands in the mountains. Photo by Rania Dimou

What can we learn from history?

The history of transhumance differs among countries, and to draw general conclusions about what history may teach us, is challenging. However, at least two simple lessons learned from history may be as follows:

1. Laws may support or hamper transhumance. Laws as the Visigoth law (410 AD) in Spain that guaranteed free transit of herds on public roads supported the increase of transhumance. In Northern Italy, the abolition of the ancient right to freely graze private fields after harvest in 1856 AD **challenged transhumance**.
2. Rural outmigration causes a lack of practitioners. History shows that, for example, both Greece and Spain have experienced rural outmigration that resulted in a lack of practitioners. A declining number of practitioners is still one of the main challenges for transhumance in all countries included in the **TRANSFARM project**.

Throughout history transhumance practitioners have developed extensive knowledge about the use of local and regional resources. They have presented great creativity in making use of natural resources and developing their products. This creativity is also reflected in the Case studies, for example, in terms of **welcoming visitors**, **direct marketing**, **using opportunities in landscape management** and **providing education in an urban environment**. To counteract the strong forces that are driving the current decline of transhumance, this creativity combined with societal and governmental support is maybe they key.

Arles Merino sheep in the Crau plain. Photo by Patrick Fabre

Recommended literature

Bele, B., Nielsen, V.K.S., Orejas, A., Ron, J.A. 2021. Intangible cultural heritage of transhumance landscapes: their roles and values – examples from Norway, France and Spain. Transhumance. Papers from the International Association of Landscape Archaeology Conference, Newcastle upon Tyne, 2018.

Bindi, L. (ed.) 2022. Grazing Communities. Pastoralism on the Move and Biocultural Heritage Frictions. DOI: doi.org/10.3167/9781800734753

Collis, J. R., Pearce, M., Nicolis, F. (eds.) 2016: Summer Farms: Seasonal Exploitation of the Uplands from Prehistory to the Present.

Liechti, K., Biber, J. P. 2016: Pastoralism in Europe: characteristics and challenges of highland–lowland transhumance. *Revue Scientifique et Technique–Office International des Epizooties* 35–2. DOI: doi.org/10.20506/rst.35.2.2541

Oteros-Rozas, E., Ontillera-Sánchez, R., Sanosa, P., Gómez-Baggethun, E. Reyes-Garcia, V. González, J. A. 2013. Traditional ecolocal knowledge among transhumant pastoralists in Mediterranean Spain. *Ecology & Society* 18–3. DOI: doi.org/10.5751/ES-05597-180333



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