



THE SILVOPASTORAL LANDSCAPE: PATTERNS AND FUNCTIONS OF WOODY FEATURES OF THE TERRITORY CROSSED BY FLOCKS OF SHEEP AND GOATS

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Abstract: Multipurpose trees is a common type of agroforestry in several ecological regions of the world. In Trás-os-Montes region, Northeast of Portugal, they are a traditional component of *Terra fria* landscape and they could be seen in several forms: scatter trees, hedgerows, small woodlots, among others. Additionally, extensive livestock systems in this region are based on grazing itineraries across the landscape. In this practice flocks interacts with these structures using them for different purposes.

Our purpose will be focused on woody features of landscape regarding species composition and shapes, their abundance and spacial distribution in order to examine how the grazing systems depends on the occurrence of these formations; particularly how animal species flocks composition are related on.

By comparing the network of woody features in agriculture matrix with to grazing territory crossed by flocks, it is possible to recognize how the influence of grazing in the occurrence of these structures is. We believe that the role of these woody structures features in supporting of traditional silvopastoral systems has been sufficiently strong to change their distribution pattern.

Single trees, hedgerows and woodlots structures associated with thirteen sheep flock journeys considering five different buffers – 10, 20, 50, 100 and 200 meters – were recorded.

Seasonality is very important to distinguish the sheep grazing itineraries. During autumn and spring, single trees and hedgerows are very demanded by shepherds and sheep. During summer and winter, these tree features seems not so important to decide the grazing journey.

Single trees, hedgerows and woodlots are managed and configured to allow an optimum use of the landscape by sheep during the year. The animal behavior in each season determines the use of these structures.

Keywords: Multipurpose trees, Northeast of Portugal, Agroforestry, Grazing itineraries, Different buffers

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