







680 hectares



improvement of grassland management

## A MIXED FARMING MODEL

Herdade do Monte Branco da Loira belongs to Casa Agrícola Manuel Gil Ferreira and stands out for its large area of 680 hectares with a remarkable diversity of production and forest types. One side of the farm is occupied with cork oak forests, the other side by holm oak, with some areas of pine trees. There are also 250 hectares of arable land, of which 60 are dedicated to irrigated land, in which a successful permanent pasture of alfafa has been installed. Most of the alfalfa is for sale, the lower quality cuttings are for self-consumption, and the remaining is grazed by the property's 1 400 sheep. This farm is using technology to help with the crop management, for example using the Normalized Difference Vegetation Index (NDVI), characterized by being a measure that quantifies vegetation by measuring the difference between near-infrared (which vegetation strongly reflects) and red light (which vegetation absorbs), where healthy vegetation reflects more near-infrared and that is how they

know which areas need more care in terms of irrigation, fertilizer or to understand the best periods to harvest. Adding to the NDVI they also calculate the temperature integrals of the crops, to understand the influence of temperatures on phenological stages and crop development, as well as to monitor pest influence. This record allows predictability for specific conditions or less pleasant surprises, such as pests. Besides these implemented practices, they incorporate pigs in their farm, during winter, to consume the acorns that come from the Montado. It is this diversification in species that provides a complete and integrated farm, with protein, acorns, grassland and cork. It is thus an outstanding example of mixed farming, harmonizing agricultural and livestock activities efficiently, as well as technology.

## **Farmer Interview** https://www.youtube.com/watch?v=vfJyIFpwKpg















