Bringing back the herds: LIFE CAÑADAS, an ecological restoration project to recover the drove roads' network of Madrid (Spain)

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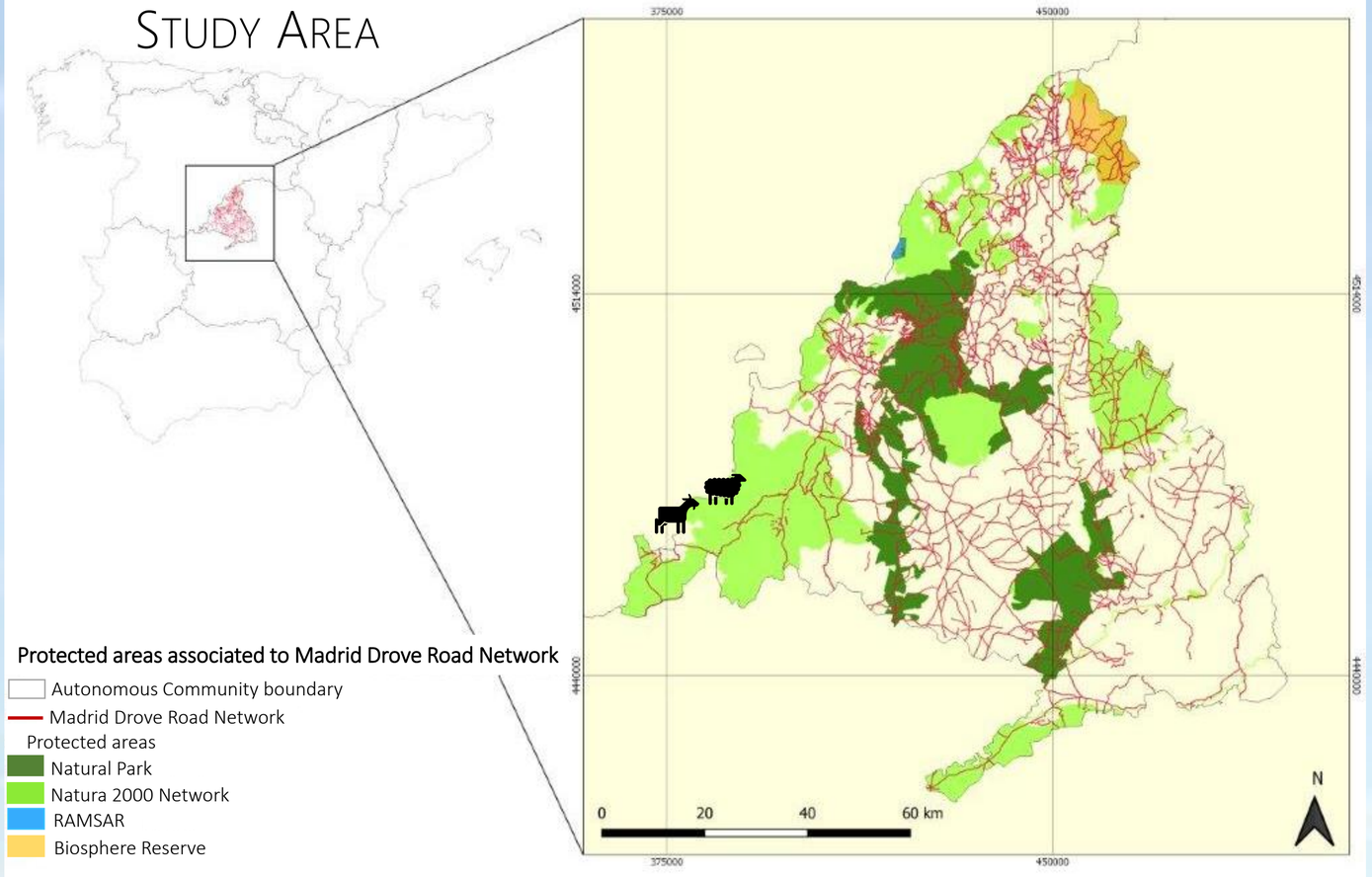
Introduction

Drove roads (DRs) are the traditional livestock routes used for seasonal movements in search of the most productive pastures. In Spain, the drove roads' network covers almost 1% of the territory. However, Spanish DRs have suffered a progressive abandonment and degradation, threatening their role as ecological corridors, especially in the Community of Madrid. LIFE CAÑADAS aims to restore some of these DRs to enhance their connectivity role between Natura 2000 sites, within a mostly agricultural and urban matrix.

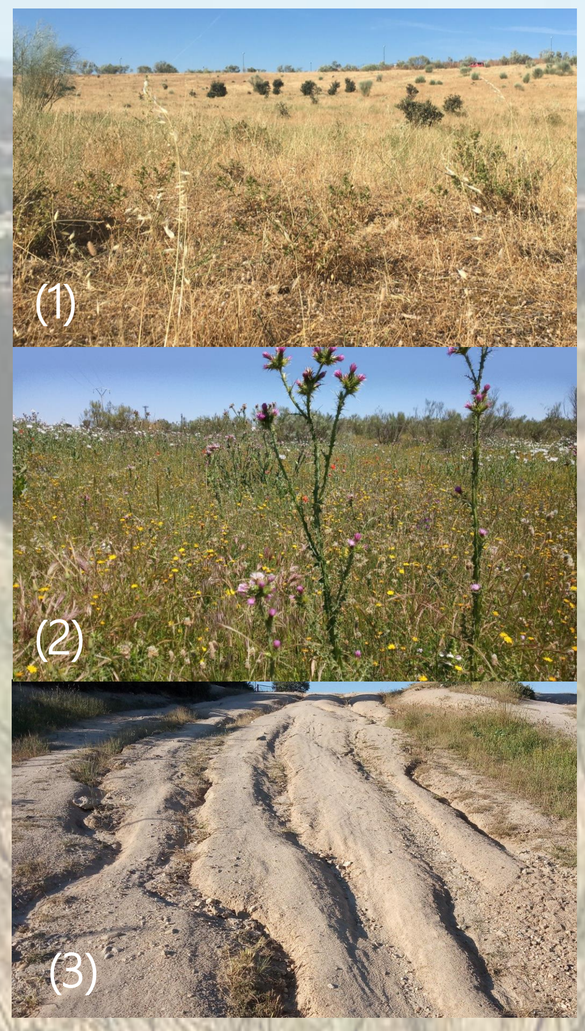
Study Area



Methodology

Before the implementation of the restoration actions, an initial diagnosis was carried out involving:

- ✓ Categorisation of the selected drove roads, according to their ecological and conservation status into (1) reference plots, (2) abandoned overgrown plots and (3) eroded plots.
- ✓ Sampling of plants, small vertebrates and arthropods diversity, as well as soil physical-chemical characteristics, litter decomposition rate (Tea Bag Index experiment) and enzyme activity.
- ✓ Social perception surveys with local population and shepherds in the selected municipalities.






Restoration Actions

- ✓ Implementation of artificial structures that generate heterogeneity at the local scale and provide new habitat resources for local biodiversity (pollinators and other arthropods, small mammals, reptiles, etc.).
- ✓ Fencing and introduction of other obstacles to stop the sources of erosion (mainly vehicles traffic).
- ✓ Ploughing and de-compaction of eroded soils.
- ✓ Re-establishment of livestock grazing with the help of local and transhumant herds, to (i) reduce plant biomass in abandoned overgrown plots and to (ii) enrich and fertilise eroded plots through livestock dung and trampling.
- ✓ Removal of illegal dumps and waste, as well as delimitation of the drove road boundaries.





https://www.lifecanadas.es/