



Impact of active coppice management on microclimate and understorey vegetation in a Mediterranean oak forest

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- Understorey vegetation (UV) supports several forest ecosystem services
- Global warming is causing UV thermophilization

- Coppice-with-Standards, widely used in Mediterranean forests, strongly affects forest structure

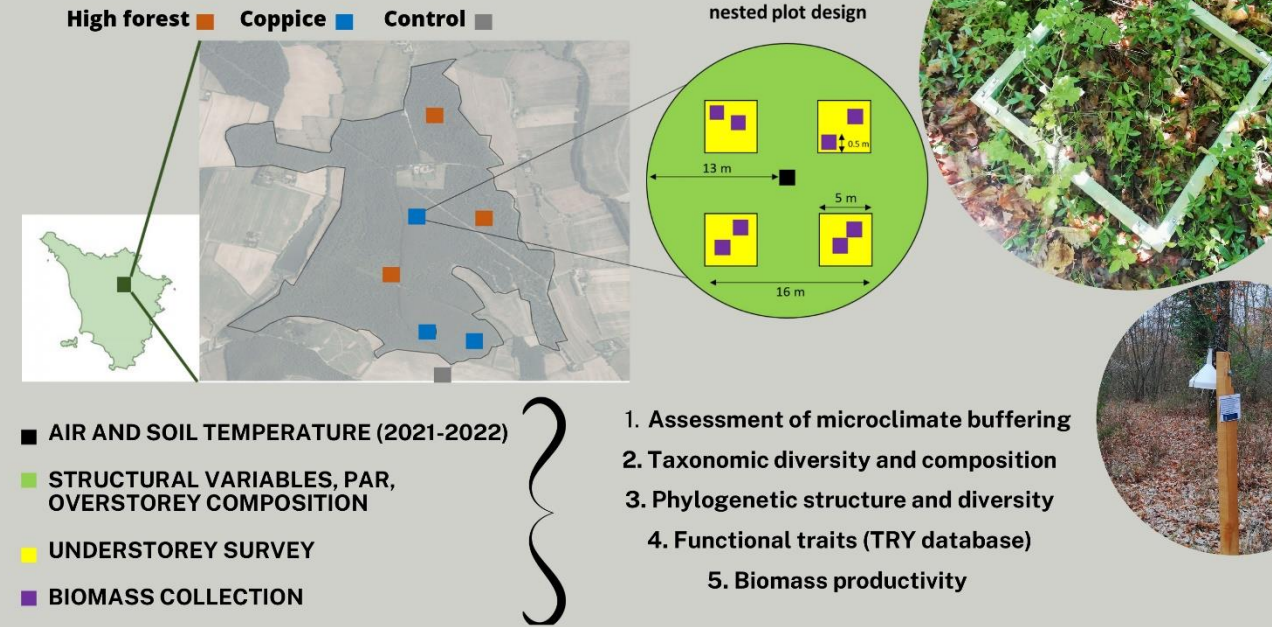
• **HOW IS FOREST TEMPERATURE BUFFERING CAPACITY IMPACTED BY COPPICING ?**

• **WHAT ARE THE EFFECTS ON UV ?**



1. BACKGROUND

2. SAMPLING DESIGN



High forest

3. RESULTS

Coppice

+2.1^o Temperature buffering capacity

Species richness +4.6

+80% Forest specialists

Generalists +60%

+0.99 UV phylogenetic evenness

UV Leaf Dry Matter Content +12.3

+0.62 UV LDMC diversity

UV biomass productivity, but not significant SR-Productivity relationship +60%

Take home message

- Coppicing reduces the temperature buffering capacity of the forest.
- Taxonomic, phylogenetic and functional diversities are differently affected.
- Need to consider all of these aspects for a holistic understanding of coppicing impacts and a more conscious application of this practice in Mediterranean oak woodlands affected by climate warming



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