Studying Ecosystem Dynamics in an **Agrivoltaic Grazing System**

We are studying the ecosystem and carbon cycling impacts of a dual-use system with integrated solar PV and grazing by comparing three different land management schemes:



Solar Energy + Mowing

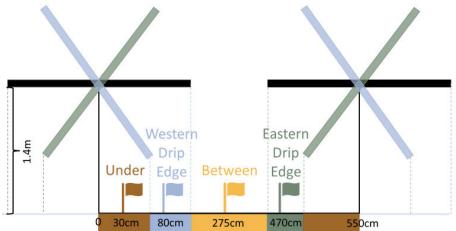


Solar Energy + Grazing



Grazing

Within each **treatment**, we've randomly selected nine 5.5m x 14m **plots** where data is collected.



The solar modules create variability in microclimate across just a few meters. To account for this variability, within each plot, data is collected across four different zones created by the modules.



Vegetation

- Live biomass & litter throughout the growing season
- **Functional** group composition



Microclimate

- Solar radiation
- Precipitation
- Humidity
- Air temperature
- Soil moisture
- Soil temperature

Soils

- **Bulk density**
- - Soil carbon and nitrogen

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