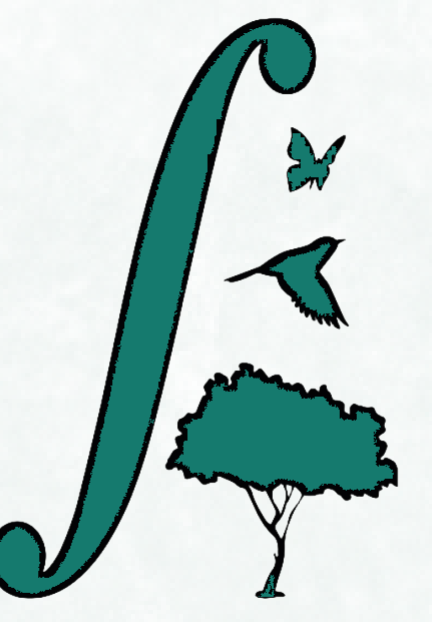


EXPLORING DIVERSITY DIMENSIONS TO PROTECT EURO-MEDITERRANEAN FORESTS

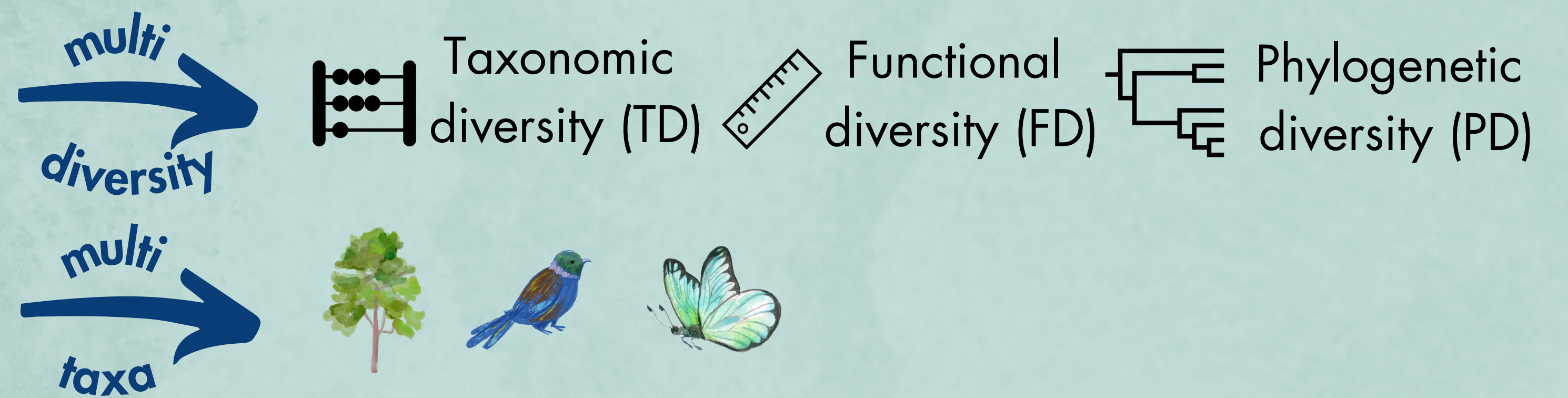


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Introduction

- **Mediterranean biome** is highly threatened by land use & climate change and is a priority area for conservation efforts
- Most conservation strategies focus on species richness (TD), thus **not taking into account diversity in traits** (FD) and **evolutionary heritage** (PD)
- **Species interactions** shape species assemblages & can affect species response to climate change: importance of **considering several taxa** while developing conservation strategies



Objectives

1

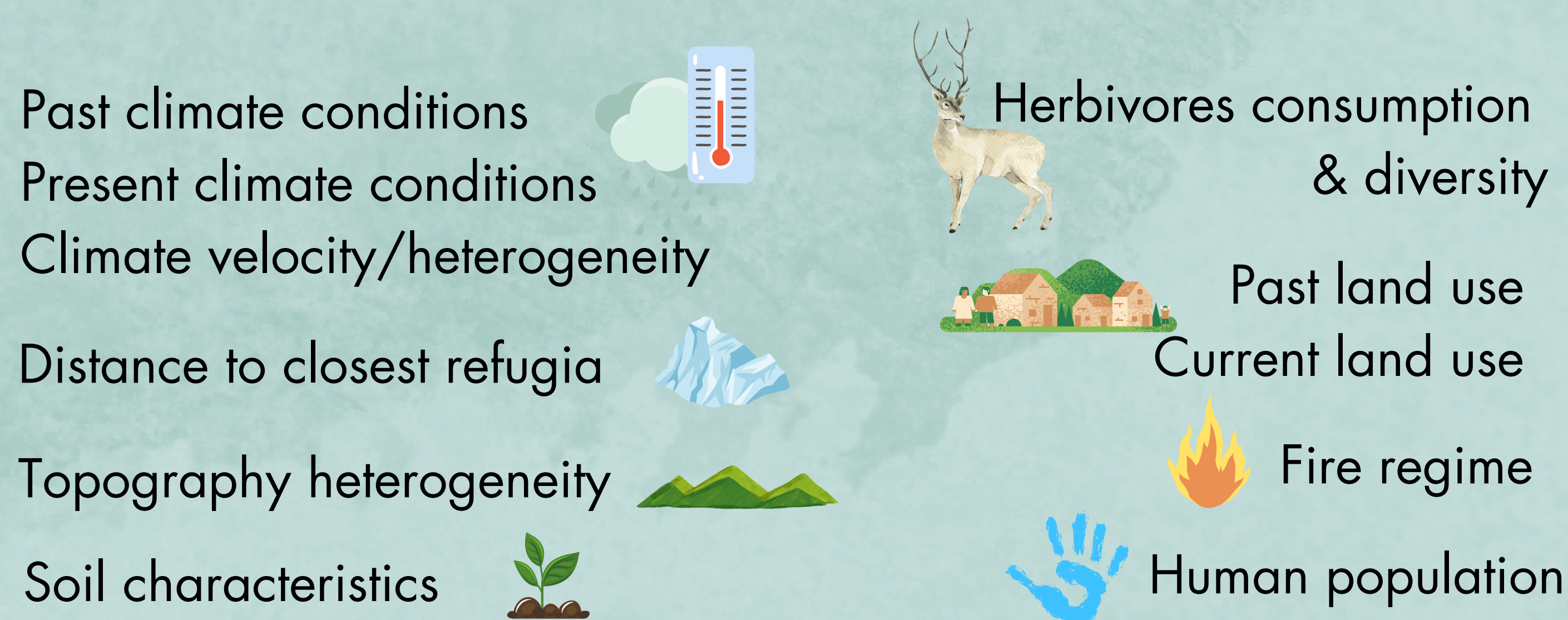
What are the **drivers of current patterns** of biodiversity: **past/current environmental conditions, biotic associations, human activity?**

2

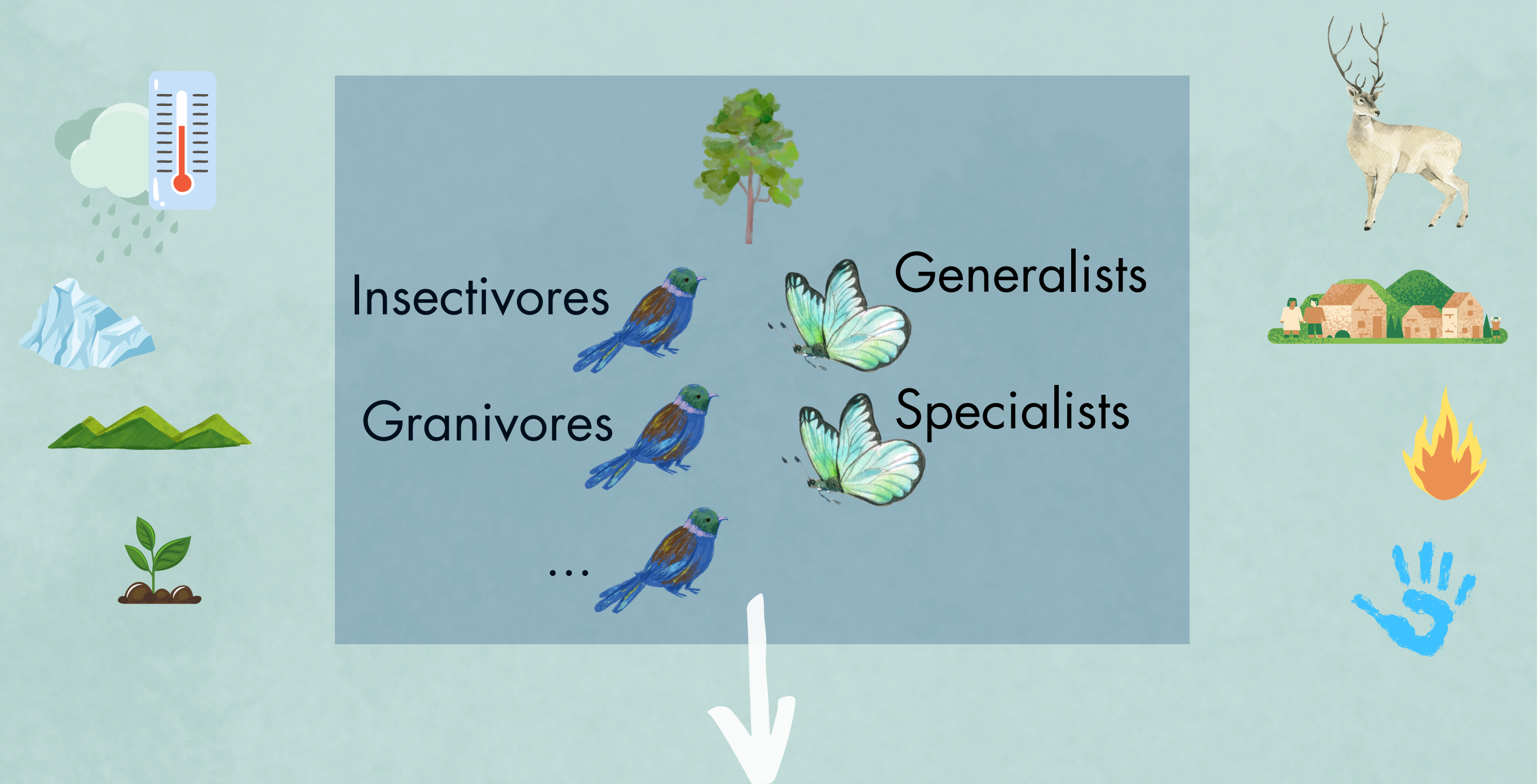
How is the Mediterranean diversity **expected to change in a near future?** How will it impact **forests C sequestration?**

Methods - Using Structural Equation Models (SEM)

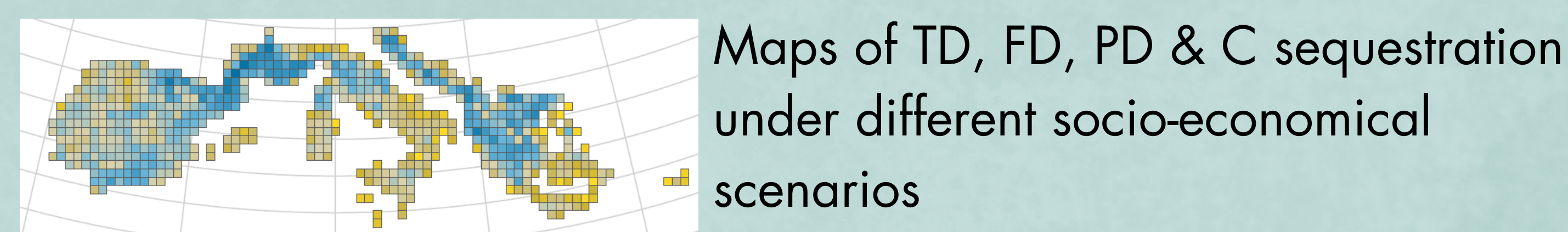
a - Define components of a network linking diversity metrics computed for each taxa & **drivers**:



b - Define & test links between the components of this network



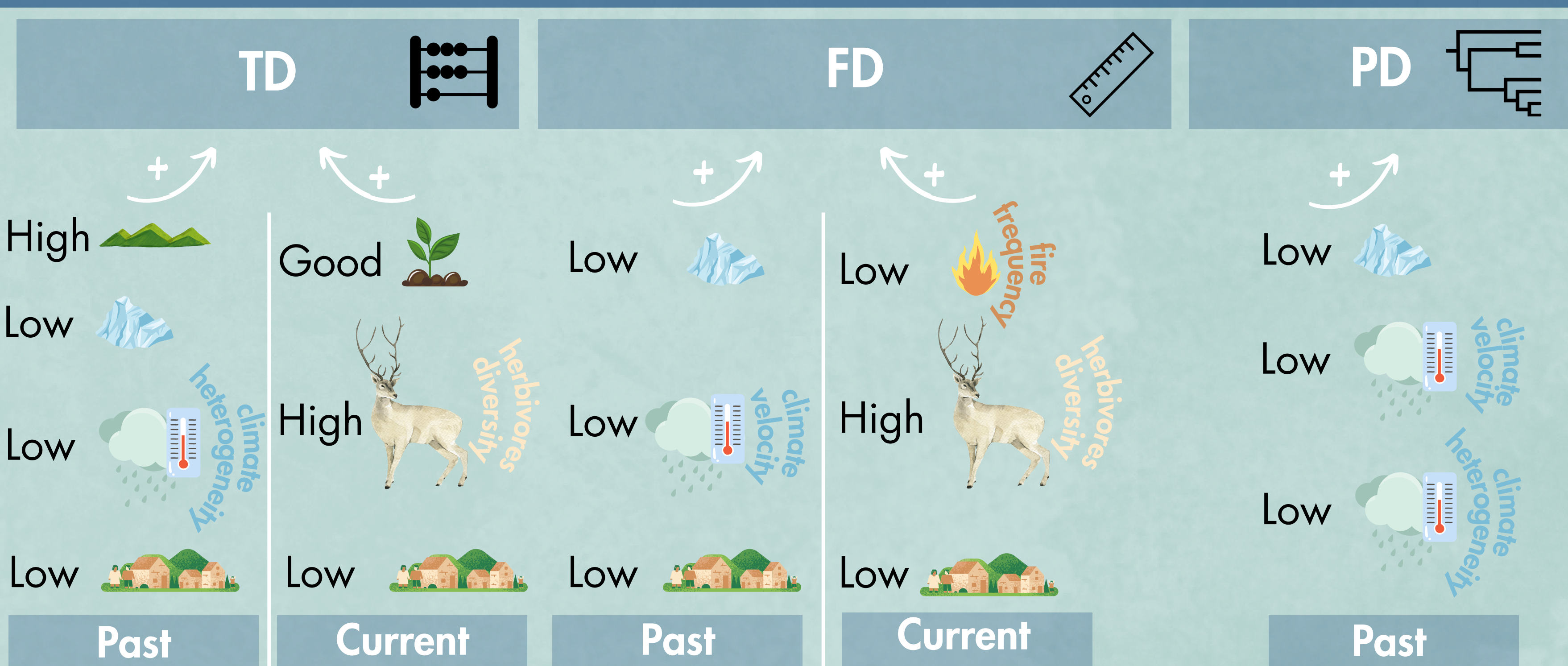
d - Use future environmental values (RCP, land use) in the SEM



c - Include remotely sensed metrics of C sequestration in the network

Net Primary Productivity
Carbon Use Efficiency

Hypotheses



Applications

Interactive maps for stakeholders:

- Future distribution of TD, FD, PD
- Comparison with **current Protected Areas**
- Areas of **high FD and PD rarity values**

Highlight the importance of different diversity facets and taxa

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