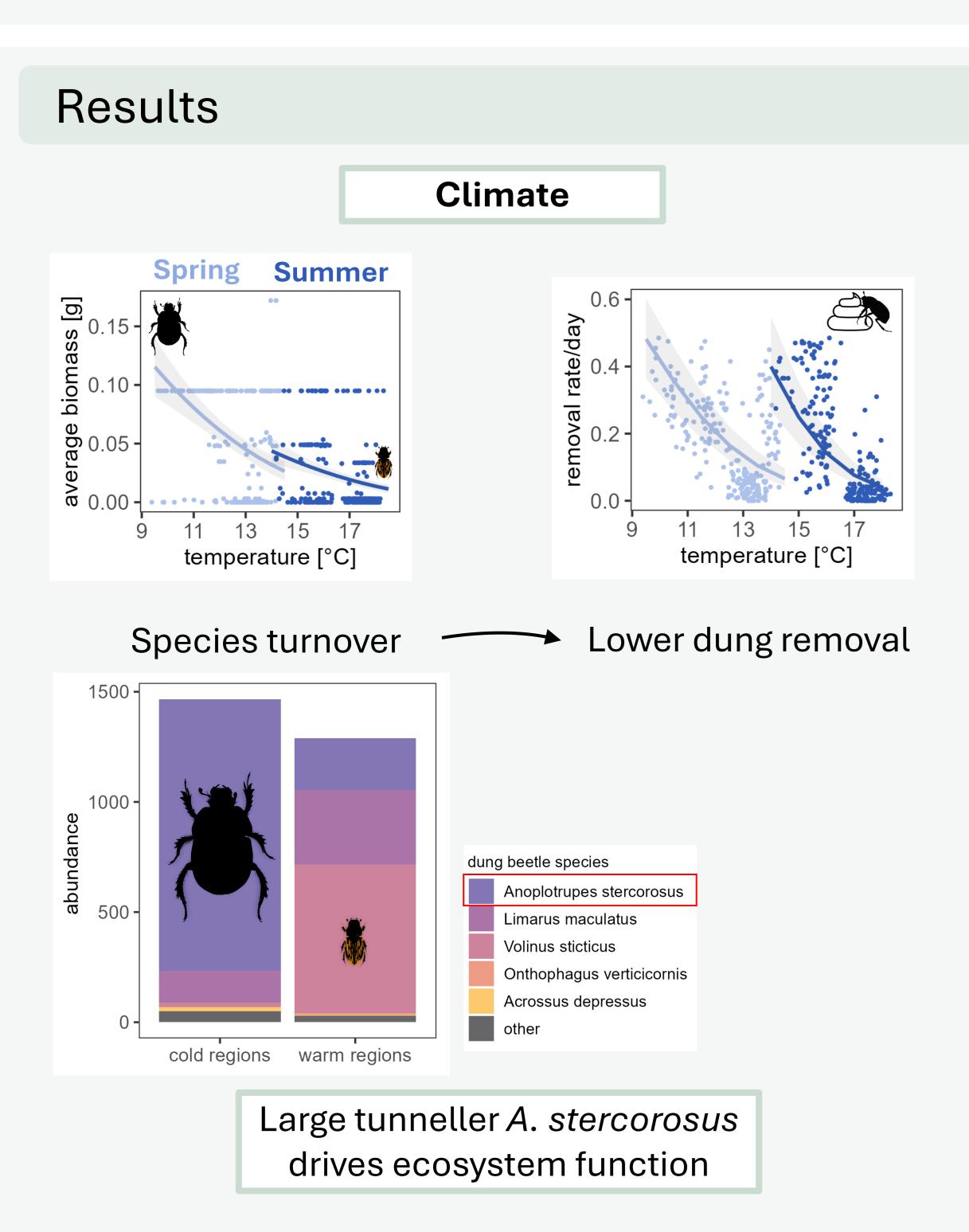
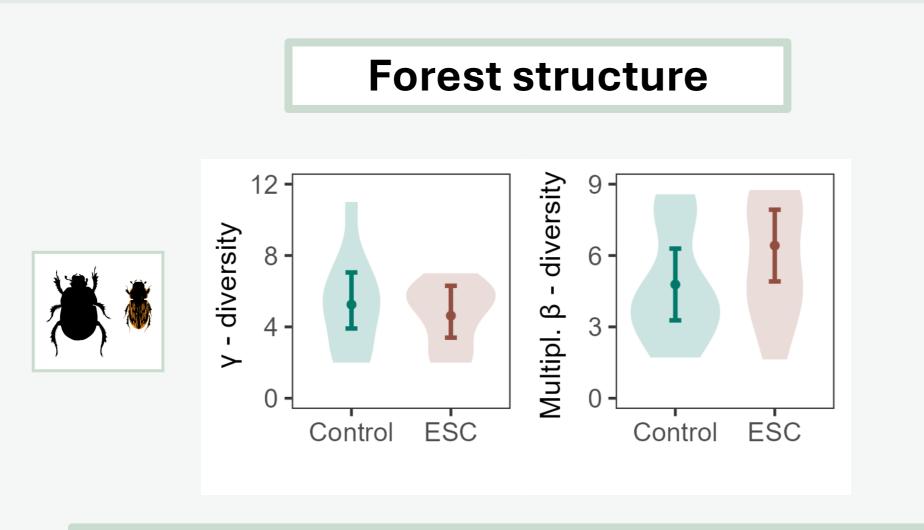


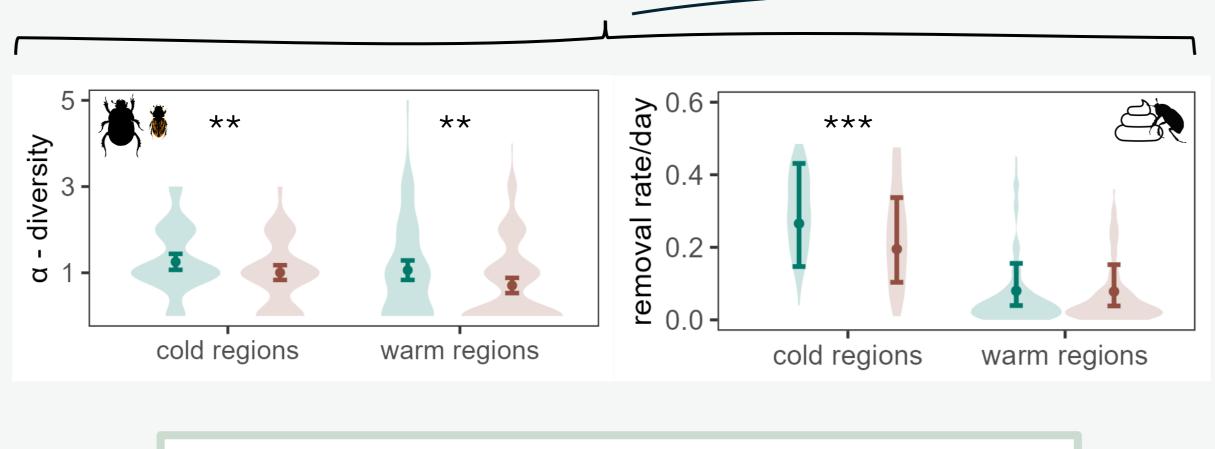
(ESC) through Silviculture



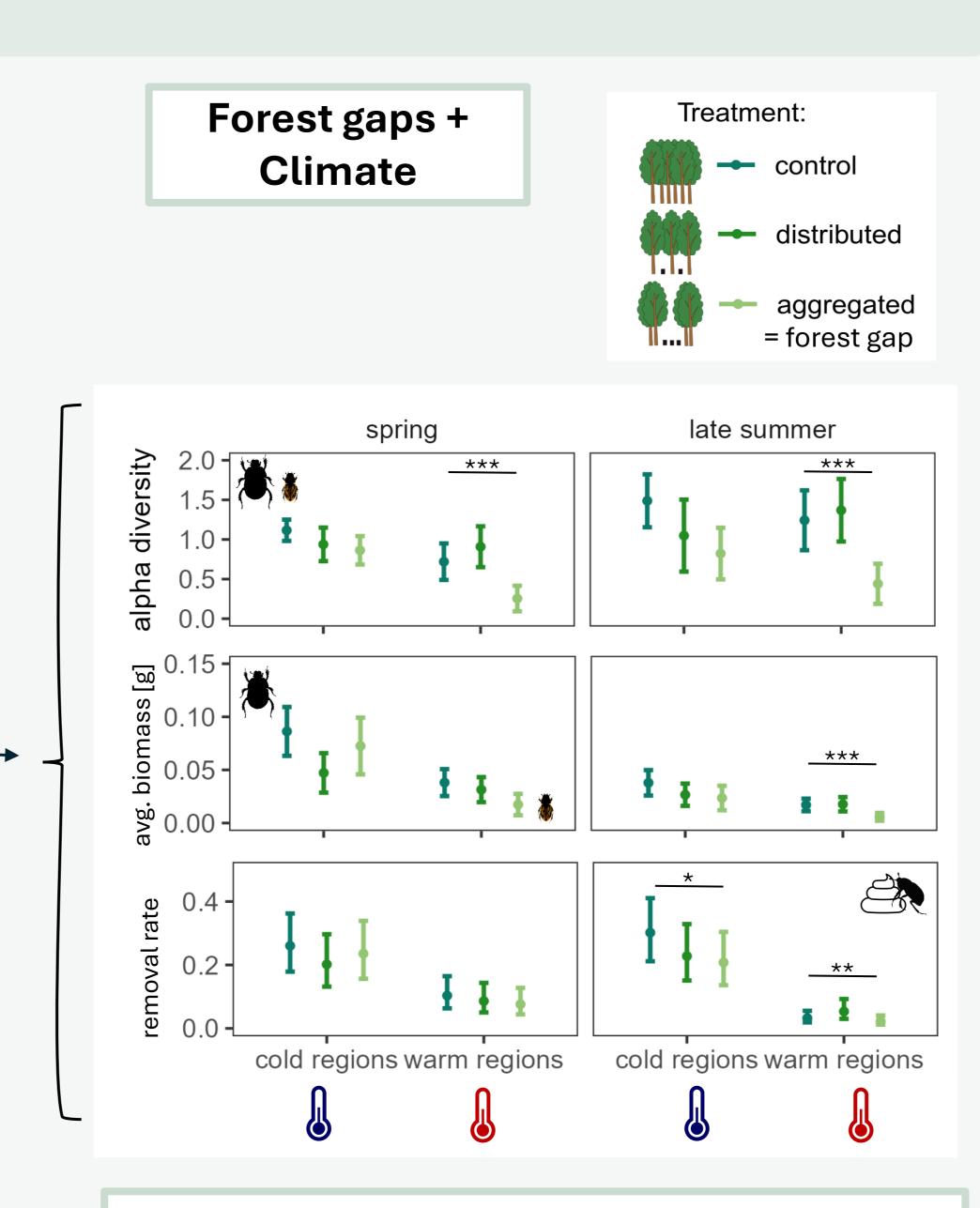


More complex forest structure (ESC) ≠ higher dung beetle diversity

Taking a closer look at forest structure



Lower alpha diversity and removal rates in ESC forests



Forest gaps + warm climate = negative effects on forest dung beetles

Conclusions

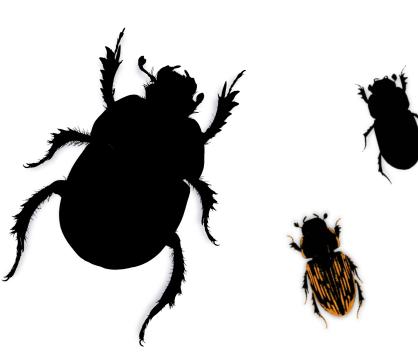
Forest structural complexity

The current species-poor dung beetle community largely depends on closed canopy forests. Therefore, species richness and decomposition processes do not profit from a forest management that enhances structural complexity at the landscape scale.

Climate

Restricted climate niche of important large tunneller A. stercorosus

Forest gap + warm temperatures = negative effects on the entire forest dung beetle community





Two sampling rounds: Spring + Summer 2023

Increased pressures under future climate warming

Need to conserve closed canopy forests

Can warm adapted species from southern Europe migrate and fill the functional gap?



