Climate change and biodiversity

Temperature - notable trends

Temperature and precipitation over time.

Phenological change

Graph showing changes in phenology over time.

Ecological indicators

Graphs showing changes in ecological indicators over time.
As a rough assessment and prognosis, from 1.5 - 23.4% of the species in the target groups may become extinct in the study area due to climate change. High montane and red listed species are disproportionately sensitive, with an extinction risk ranging from 3.3% to 75.0%.

Relocation of communities

Newcomer

Volvariella bombycina
Silver-silk straw mushroom

Oxythyrea funesta
Rose chafer (rare steppe inhabitant)

Results

- Communities are undergoing a process of reorganization in their species compositions.
- Our results support the view that mobile ectothermal arthropods show a direct response to climate fluctuations, but not birds and plants.
- Species from mountains are disproportional sensitive to climate change. There are some obvious cases of species that with climate change should lose parts of their range.

Thuiller et al. 2005