

## **Abstract:**

The present study deals with ecological impact of giant hogweed (*Heracleum mantegazzianum*) invasion in Slavkovský les area. Being one of the prominent invasive species with significant impact on human health it has been subjected to a wide research. In spite of that little is known about its impact on the invaded ecosystem. My research was therefore focused on analysis of the ecosystem impact, particularly 1) microclimatic measurements of temperature and soil moisture and their comparisons between invaded and noninvaded vegetation, 2) comparison of germination and survival of model plant species sowed into invaded and noninvaded plots and 3) study of the effect of *H. mantegazzianum* presence on model species seed production.

Results have shown significant alteration of microclimate due to *H. mantegazzianum* invasion. Further research is needed to resolve what impact it may pose to species in invaded communities. The effect of *Heracleum mantegazzianum* presence on germination and survival of model species was not significant. Similarly, seed production of model plants was not significantly affected.