

Report on the outcomes of a Short-Term Scientific Mission¹

Action number: **CA18201**

Grantee name: Katerina Iberl

Details of the STSM

Title: International action plans for species protection, based on the example of *Gentianella praecox ssp. bohemica*

Start and end date: 07/08/2023 to 29/10/2023

Description of the work carried out during the STSM

Critically endangered taxa require not only a timely assessment of genetic diversity and structure. Best practice protocols concerning management are of vital importance to safeguard the rescue success and a long-term survival of threatened taxa, as well as to maximise the effective use of available financial sources. These protocols are based on a decade-long experience of dedicated experts and practitioners.

To achieve this goal, I carried out following activities.

I first got acquainted with reports and published literature related to the management measures regarding the study species.

Further, together with the Bohemian Forest National Park, I organized a cross-border meeting of German, Austrian and Czech practitioners and experts, dealing with practical and theoretical issues to safeguard a long-term survival of the species.

A field excursion was conceived not only to demonstrate the-best-practice results, but also to discuss the germplasm-donor qualities of certain populations to rescue genetically depaupered Bavarian populations.

Moreover, I consulted German representatives of local authorities and practitioners concerning possible cross-border reintroduction efforts.

Further, I inspected a potential German site where conditions are being adjusted (tree removal, creation of irrigation channels) for possible reintroduction using local seed mixtures of a high genetic quality.

Finally, I prepared a draft of a decision tree for the best management and rescue practice. Additionally, a document summarizing all available relevant information about the species, its requirements and prospects is now in preparation and will be further discussed in an international working group. Thus, the necessary groundwork for the preparation of an international guidelines-document has been laid.

¹ This report is submitted by the grantee to the Action MC for approval and for claiming payment of the awarded grant. The Grant Awarding Coordinator coordinates the evaluation of this report on behalf of the Action MC and instructs the GH for payment of the Grant.

Description of the STSM main achievements and planned follow-up activities

The COST programme allowed me to further build new connections and create cooperation with leading practitioners and experts working with *G. praecox* ssp. *bohemica* for a long period.

A significant achievement of the STSM was to establish and to promote cross-border consulting between the practitioners and stakeholders in Germany, Austria, Czechia and Poland. Specifically, consulting and cooperation among practitioners, but also local authorities as well as relevant representatives of two National Parks (the NP Bohemian Forest and the NP Bavarian Forest) have been launched.

Moreover, a new cooperation with the further Austrian researcher and practitioner group has been launched. Thus, the scope of scientific issues as well as practical approaches applied in the project will be enlarged.

Materials and data concerning population fluctuations, survival rates, applied practices and management, success but also failures and “bad practices”, have been collected from project participants from Austria, Poland, Czechia and Germany as a necessary data source. Bottlenecks in the life cycle of the species were identified, as well as specific research needs in the near future (study of a microrelief, mycorrhiza and other biotic factors influencing survival during the most critical stages of the species’ life cycle).

During December 2023, two meetings will take place. First, a meeting with an Austrian working group at the University of Natural Resources and Life Sciences, Vienna, to exchange available experience as well as to share the research achievements. Further, an international meeting will take place at the Institute of Botany, Prague, to further consult and prepare a joint document summarizing the experience and best management / rescue practices (“decision tree”) in several threatened species.