

Life Seedforce: improving the conservation status of critically endangered species in Europe

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Developing successful plant conservation projects is a challenging task and requires an inclusive and multi-disciplinary approach, drawing on diverse expertise to address all conservation issues for a successful outcome. In this context an integrated in-situ and ex-situ approach can yield numerous benefits and offer opportunities to showcase in the botanic garden the threatened plants, to build participation and support from the local community. As a case study, the Life SEEDFORCE project will be illustrated (LIFE20 NAT/IT/001468 - Using SEED banks to restore and reinFORCE the endangered native plants of Italy). The project targets 29 policy species reported in bad conservation status in Europe according to the EU Habitat Directive, aiming at reversing the current unfavourable conditions. The target species were chosen as flagship species for Italy and will benefit from habitat improvement and well-targeted multiplication and translocation activities, designed to counteract both external habitat-related threats and intrinsic species-related threats. Dedicated preparatory actions assessed population genetic diversity, analysed the climatic envelope and projected future scenarios, taking into account trophic dependencies, thus guiding the preparation of the propagation mixes best adapted to each site, to be used for plant translocation (either reintroduction or population reinforcement). The project is now halfway through its lifecycle. At this stage of advancement, a series of best practice activities will be illustrated, including the use of drones to monitor population sizes in habitats that are difficult to access, such as cliff faces, as well as plant propagation techniques and habitat improvement activities. A series of engagement activities are planned towards the end of the project to gain public support and to involve farmers that in most cases can influence the long-term conservation of many plant species in secondary habitats.