

Appendix B

Suggested protocol for conservation translocations of succulent plant species*

- Select a target species based its conservation status.
- Conduct a literature survey to determine the habitat and microhabitat requirements of the species associated with *in-situ* survival.
- Identify suitable receptor sites for translocation based on literature and surveys.
- Identify appropriate donor populations for seed collection.
- Obtain permits required for *in-situ* seed collection.
- Undertake propagation in a manner that prepares seedlings for transplantation with minimal root disturbance (e.g. use of biodegradable gusset bags).
- Apply fungicides and insecticides to keep seedlings free of pests and pathogens.
- Maintain the cardinal orientation of the seedlings during propagation.
- Apply a biostimulant such as potassium silicate ($K_2 SiO_3$) during propagation.
- Seedlings should be grown as long as possible to gain size.
- The cardinal orientations of the seedlings should be maintained during propagation.
- Hardening off of the seedlings should be undertaken prior to translocation.
- Translocation should coincide with the onset of the growing season during a period when good rainfall is predicted.
- Seedlings should be planted with their gusset bags in the shade of an appropriate nurse plant (when such interactions are noted *in-situ*).
- The cardinal orientations of the seedlings should be maintained during transplantation.
- The soil should be gently compacted around gusset bag, and the seedlings should be watered enough to allow the soil to settle around them.
- Measures should be put in place to reduce the risk of fires and other potential disturbances in the receptor sites.
- Survival and growth data should be collected and analysed at regular intervals as part of a long-term monitoring plan that will enable assessment of translocation success.

* Points not indicated in bold are highly recommended experimental interventions, but that were not empirically tested in this study.