



ESCAPE

Ex-situ conservation of Finnish native plant species

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Motivation

- Rapid anthropogenic changes globally and locally
- Urgent need for protection in the form of **gene banks** to back up and complement *in situ* conservation.
- EU is committed to **halt the loss of biodiversity** by 2020 in Europe
- Ecosystem services and ecosystem restoration may need *ex situ* conserved material



ESCAPE in a nutshell



- ***Ex situ*** Conservation of Finnish Native Plant Species
- A 5-year project funded by EU LIFE+ 2011 Biodiversity program
 - From 1 Sept 2012 to 31 Aug 2017
- Targets set to fulfill parts of the national action plan for plant *ex situ* conservation
- Total budget c. 2 M €
- Ministry of the Environment as a co-financier
- Four partners/beneficiaries
 - Coordinator Finnish Museum of Natural History – LUOMUS
 - Botanical Garden, University of Oulu
 - Metsähallitus Natural Heritage Services
 - Finnish Environment Institute



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Five main targets of ESCAPE



I
Secure the extant
ex situ collections

II
Increase the
number of *ex situ*
conserved taxa

III Develop *ex situ*
conservation
methods for
boreal and arctic-
alpine taxa

IV
Use *ex situ* material
in re-introductions,
assisted migration
and potentially also
in restoration

V
Use *ex situ*
collections in
education and
public outreach



..and what have we done thus far:



1. Priority list of 180 native taxa to be collected (1-3 populations)
2. National seed-bank founded in Kumpula Botanic Garden
3. Collected material (seeds, plant tissues) stored either in the seed bank or as micropropagated tissue in a cryogenic storage
 - 27 taxa of 39 origins in seed bank, 1 in cryo, 7 in micropropagation
 - duplicates in Millennium Seed Bank, Wakehurst
4. *Ex-situ* collections checked periodically: vitality, data accuracy
5. Accession duplication (at least in two gardens) under progress





..to be continued...



6. 71 accessions of threatened taxa in ex-situ collections
7. Reintroductions started: *Crepis tectorum* var. *nigrescens*, *Melica ciliata*
8. Population enlargement: *Hypericum montanum*
9. Bryophytes: cryo-method development, population background study on three focal spp.
10. Trials of assisted migration started: *Primula nutans* var. *jokelae*, (materials produced for e.g. *Salix pyrolifolia*, *Puccinellia phryganoides*...)
11. Several publications, presentations and web-materials produced
12. Educational work; method documentation; co-operative projects initiated: *Astragalus glycyphyllus*, *Cinna latifolia*





More Information available at
www.luomus.fi/escape



Thanks for your attention!

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