

*"The first signs of spring are clear in the Kumpula Botanic Garden: buds are swelling and the first starlings have been sighted. Indoors at the seed bank, I have enjoyed spring since mid-winter: the delicate green seedlings in the petri dishes witness the excellent quality of last summer's seeds and the successful simulation of a natural habitat."*

– Mari Miranto, head of the seed bank

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## CONTACT DETAILS

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[www.luomus.fi/en/ex-situ-conservation-finnish-native-plant-species](http://www.luomus.fi/en/ex-situ-conservation-finnish-native-plant-species)

[www.facebook.com/kasvitieteellinenpuutarha](https://www.facebook.com/kasvitieteellinenpuutarha)

## ACHIEVEMENTS

So far, a total of 180 plant species conserved ex situ, including both vascular plants and mosses, have been added to the collections of the botanical gardens in Helsinki and Oulu. Most species are stored as seeds at the seed bank in the Kumpula Botanic Garden, which houses seeds for 142 species. In addition, the botanical gardens are home to 64 species conserved as living plants.

The botanical gardens in Oulu also store the preserved tissue of 70 species. The project has developed a cryopreservation method for 35 species, and thus far 10 species have been cryopreserved permanently.



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# ESCAPE

1 September 2012–31 August 2017

EX-SITU  
CONSERVATION  
OF FINNISH  
NATIVE  
PLANT  
SPECIES



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The ESCAPE ex-situ conservation project of Finnish native plant species implements the Global Strategy for Plant Conservation in Finland. The project is funded by the EU's Life+ programme and coordinated by the Finnish Museum of Natural History LUOMUS. Associated partners are the Botanical Gardens of the University of Oulu, the Parks & Wildlife Finland unit of Metsähallitus and the Finnish Environment Institute.

### WHAT IS EX-SITU CONSERVATION?

Ex-situ conservation is the protection of native organisms off-site, i.e., outside of their natural habitats. It complements in-situ conservation, in which species are protected in their native habitat. Typical examples of off-site conservation include botanical gardens, zoos, aquariums and various gene banks that house a variety of species. Plant species can be conserved ex situ as living plants, seeds or frozen tissue.

The objective of the ESCAPE project is to promote the protection of threatened native plants in Finland and to develop new methods of ex-situ conservation. ESCAPE aims to ensure the preservation of biodiversity for future generations and to increase awareness of off-site conservation among decision-makers and the public.



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During the project, a total of nine populations of the sea thrift *Armeria maritima* subsp. *intermedia*, the mountain St. John's wort *Hypericum montanum*, the violets *Viola uliginosa* and *Viola collina*, the milkvetch *Astragalus glycyphyllos* and the grass *Puccinellia phryganodes* were reintroduced to their original habitats.

In addition, two populations of the wormwood *Artemisia campestris* subsp. *bottnica* and three populations of the grass *Puccinellia phryganodes* were successfully planted in completely new, favourable areas through assisted migration. The balsam willow *Salix pyrolifolia* will also be planted into new areas during the project.

Moreover, plant populations have been strengthened both in their natural habitats and in botanical gardens by planting new specimens.



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ESCAPE has gained visibility through several publications and various campaigns, workshops and open access exhibitions. The project also provides topical information on its website and Facebook page.

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### EX-SITU CONSERVATION IN THE FUTURE

With biodiversity decreasing, developing new conservation methods is more important than ever. Although the ESCAPE project concludes in 2017, ex-situ conservation will continue. To support the continuation of conservation work, ESCAPE will publish ex-situ conservation guides on the project's website.

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