

These Are the Seed Banks from Around the World that Will Save Us from the Apocalypse

DORNITH DOHERTY Mar 29 2017, 8:30am

Photos from Dornith Doherty's project, 'Archiving Eden.'

In the Arctic Circle, about 800 miles from the North Pole, on the Norwegian island of Spitsbergen, lies the Svalbard Global Seed Vault. A repository for the earth's seeds, Svalbard acts as a fail-safe freezer built within the permafrost to withstand time as well as natural and manmade disasters. It also serves as a backup for the hundreds of other more vulnerable gene banks around the world. The threat of climate change, decreasing agricultural diversity, extinctions, or a single catastrophic event has given rise to the need for such a safeguard, should reintroduction of species become necessary in the future.

With Svalbard as a starting point, Guggenheim Foundation Fellow and research professor Dornith Doherty has been documenting the world's seed banks since 2008. Over four continents, from Australia's Kings Park & Botanic Gardens to the N.I. Vavilov Research Institute of Plant Industry in Russia, her project, *Archiving Eden*, documents the places and processes behind an international effort to catalog and protect the earth's fragile plant life.

Dornith Doherty's Archiving Eden will be published May 2017 by Schilt Publishing.



On the remote island of Spitsbergen, the Svalbard seed collection is safeguarded against civil strife and natural catastrophes. No research is conducted on site; it's solely for the storage of seeds. Supervised and governed by the International Treaty on Plant Genetic Resources for Food and Agriculture, this facility does not accept GMO materials.



Governments from around the world are collaborating to create the first truly global botanical-backup system here. The gravity of climate change and political instability has created the need for this inaccessible "Doomsday Vault," which is opened for only a few days a year, when more seeds are placed inside for storage. It can be remotely monitored from mainland Norway.



A biogenics lab at EMBRAPA Genetic Resources and Biotechnology, Brasilia, Brazil. Now a dominant product of world agriculture, corn is used not only as human food but also for animal feed, high-fructose corn syrup, ethanol (fuel), and plastics. It's the subject of research in many seed banks, too.



Kuban Experimental Station of the VIR, Krasnodar Territory, Russia. Established in 1924, the station studies maize, sorghum, sunflower, and castor oil plants, and carries out immunological research on barley and wheat.