



## Seeds for Survival (Norwegian Seed Bank)

Storing millions of seeds? Underground? That is what the Norwegian government is doing! Norway has established the Svalbard Global Seed Vault as an underground storage for the world's seeds. It is located about 700 miles from the North Pole, on the Norwegian island of Spitsbergen. These scientists want to prevent the loss of Earth's unique plants. Approximately 1.5 million distinct seed samples of agricultural crops exist. There are about 1,400 seed and/or gene collections around the world, but many are in countries that are politically unstable or environmentally threatened. If something were to happen to a seed bank in those countries, this would provide a way to replenish them.

Spitsbergen was considered ideal because of the permafrost and lack of earthquakes. The seed bank is constructed 394 ft. inside a sandstone mountain and 430 ft. above sea level to make sure that the site remains dry, even if the icecaps melt. Locally mined coal provides power for refrigeration units that cool the seeds to the recommended standard of 0° to -20°F. Even if the equipment fails, it would take several weeks for the temperature to rise to 30°F, the temperature of the surrounding sandstone bedrock.

Costing about \$9 million, the Seed Vault was built and paid for entirely by the government of Norway. It opened officially on February 26, 2008. Although the variety and volume of seeds stored will depend on the number of countries participating, the vault has a capacity to conserve 4.5 million. The first seeds arrived in January, 2008.

### **Questions to Talk about and/or Research:**

- Why would it be important to have a seed bank?
- What is permafrost? How does it affect the seed bank?
- What might opponents to this project be concerned about?
  - How is such a bank maintained?
- Why would a Christian be interested in this kind of project?

### **Research Ideas**

Permafrost, agricultural crops, seeds