

A landscape of rolling hills under a cloudy sky, with a fence in the foreground. The hills are covered in green and yellow grass, and there are some dark patches of trees or shrubs. The sky is blue with some white clouds.

# Soil fungal communities related to C cycling in upland and polar environments

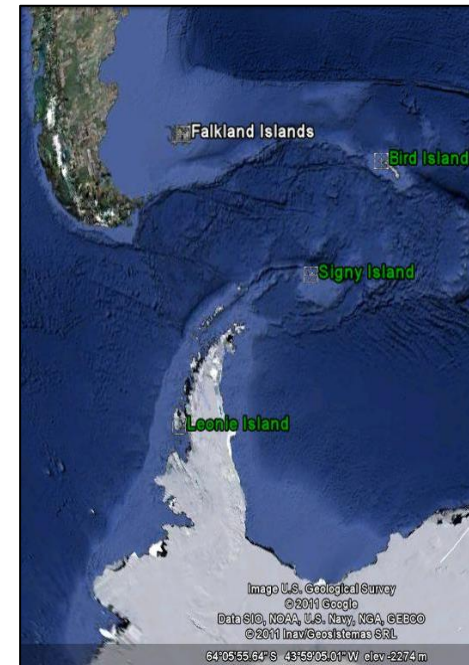
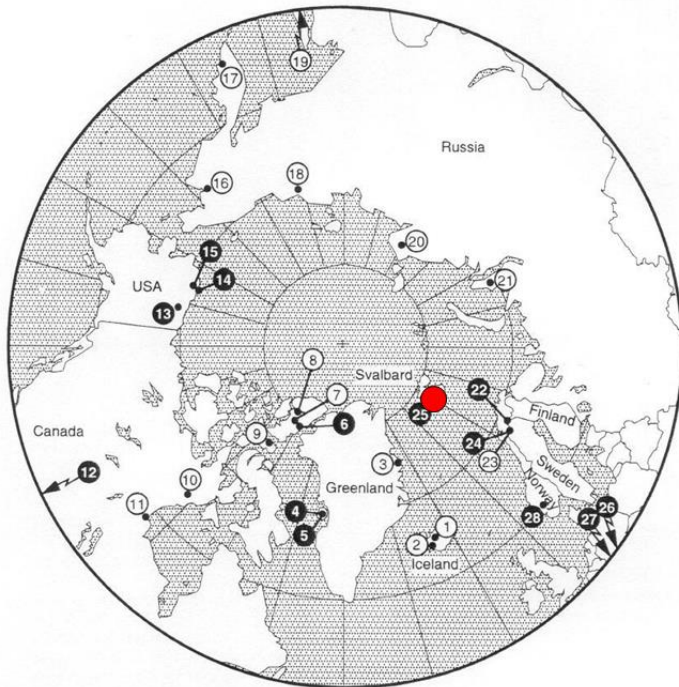
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# Polar semi-desert, Ny-Ålesund, Svalbard (79°N)



# Sub- & Maritime Antarctic (54°S, 61°S 68°S)



Imago U.S. Geological Survey  
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64°05'55.64"S 43°59'05.01"W elev:2274m

# Experimental treatments

- **'Functional redundancy'**
- **N & P addition**
- **Warming**

# Structure of fungal community

- **Molecular techniques – DNA**
- **Ergosterol, PLFAs**
- **Isolations into culture**

# Function – C cycling

- **Molecular techniques – RNA**
- **Enzyme activity in natural & synthetic media**
- **$^{14}\text{C}$**