

## Carbon within Scotland's soils; why is it important?

High carbon dioxide levels in the atmosphere are one of the key causes of climate change.

- Scottish soils are an important store of carbon, particularly our peatlands.
- The peatland carbon has been mapped across the country, see the map poster. Particularly high concentrations are found in Caithness, on Lewis and on the Shetland Isles.

- Peatlands should grow and accumulate carbon, however inappropriate management, such as drainage or over-grazing, can lead to carbon losses.
- **Our research aims to understand the impacts of both land use and climate change on peatlands, investigating the best options for restoring and managing the carbon sink function of our peatlands.**

### Facts and Figures

- In Scotland, about 60 times more carbon is found in the soil than in plants, including trees.
- 1,620 million tonnes of carbon are stored in peatland
- The amount of carbon stored in peatlands is about 125 times the total amount of carbon dioxide emitted each year in Scotland.
- Annual fixation by peatlands may amount to 0.4 million tonnes of carbon per year. This carbon sink would offset about 3% of Scotland's total carbon dioxide emissions.

### Two main peatland types



Basin peat



Blanket peat