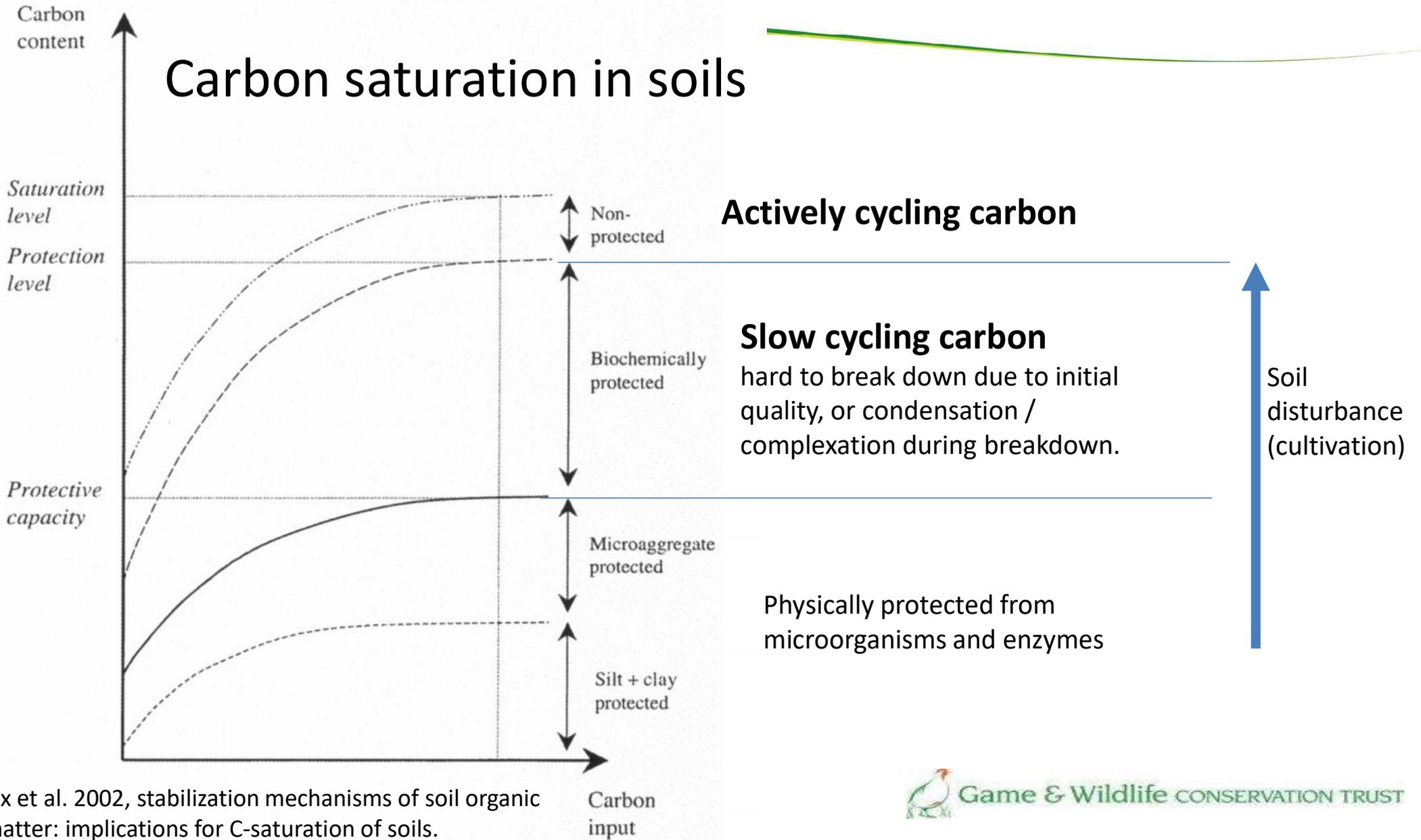


Soil carbon research at the Allerton Project

Dr Jenny Bussell
- Soil Scientist, Allerton Project

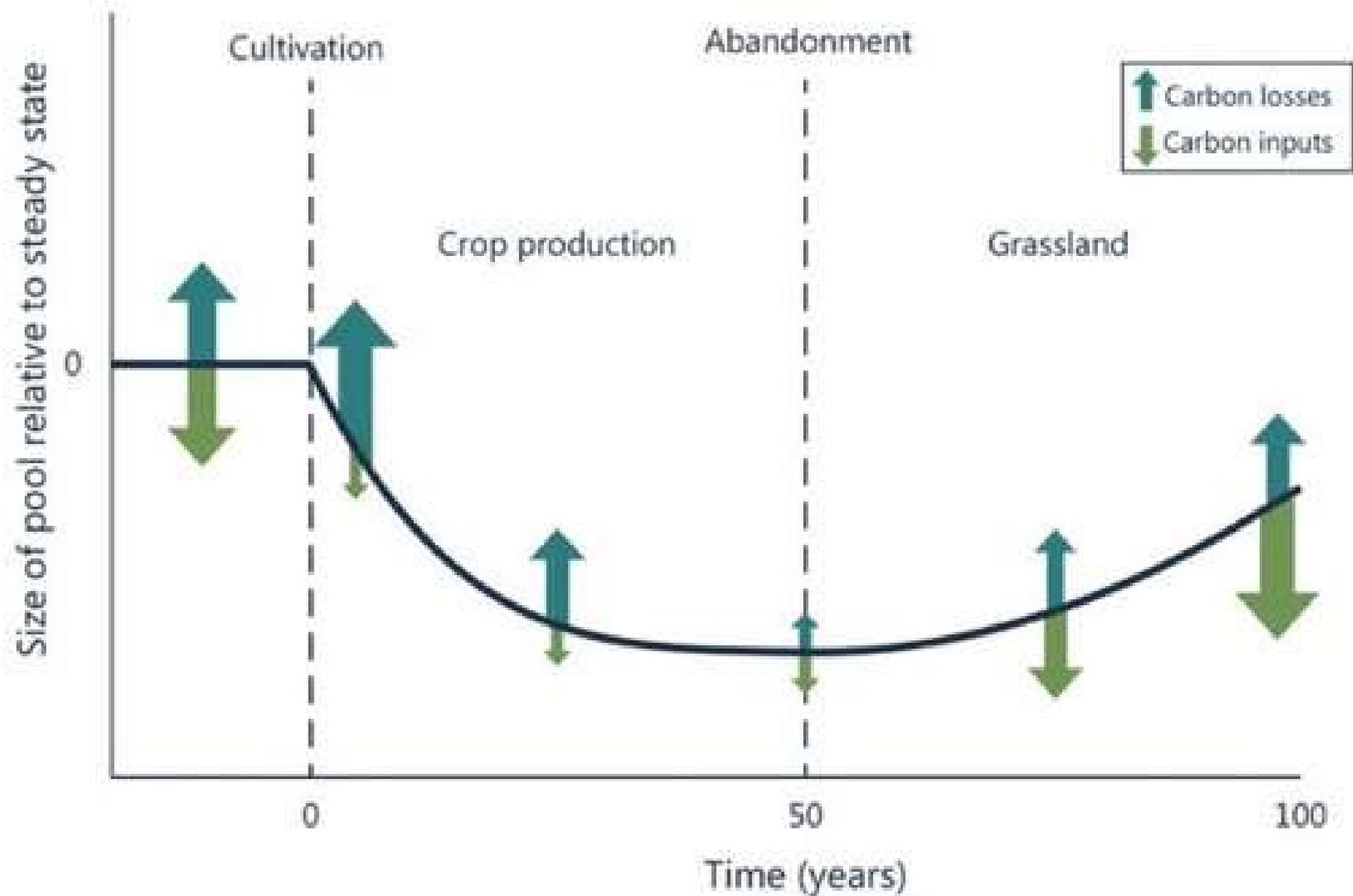


Carbon saturation in soils

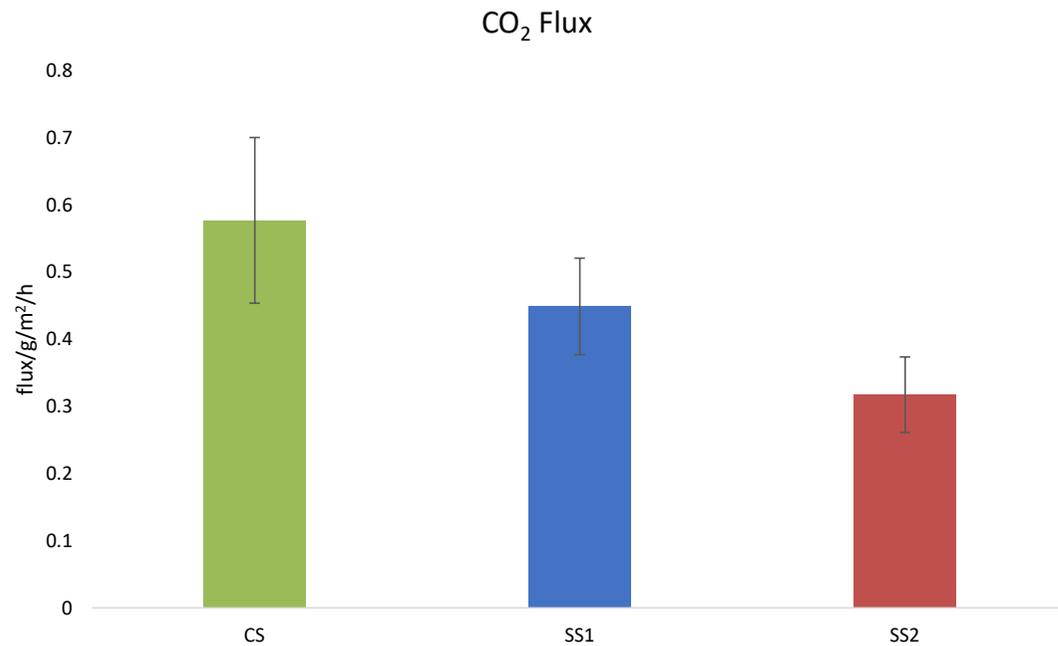


Six et al. 2002, stabilization mechanisms of soil organic matter: implications for C-saturation of soils.

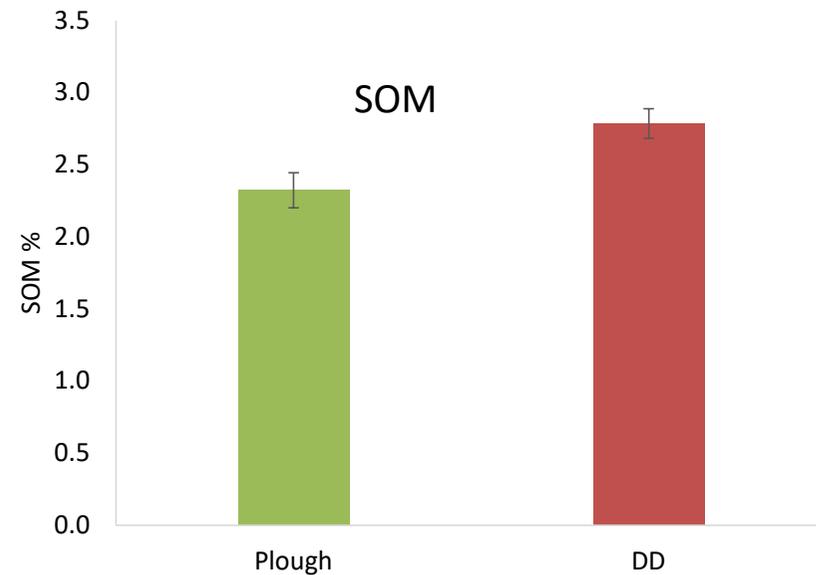
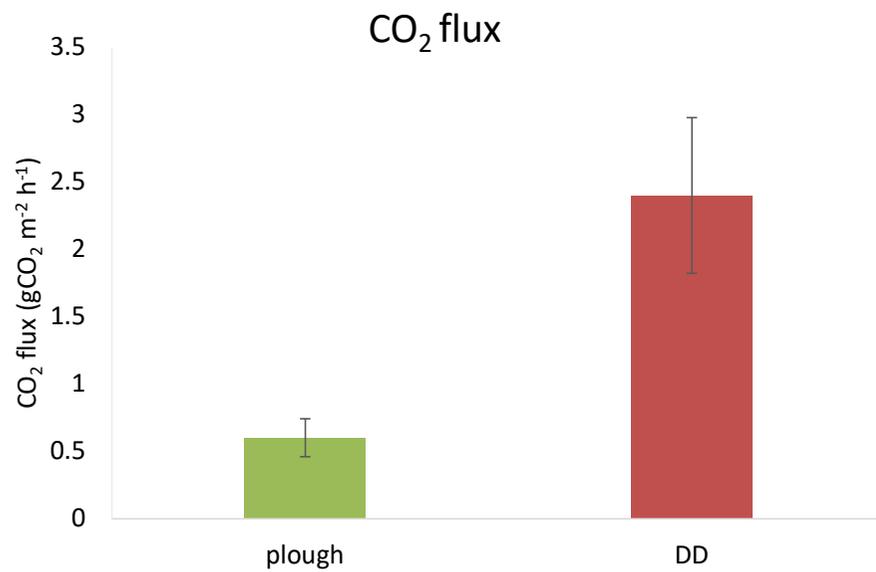
Soil C storage



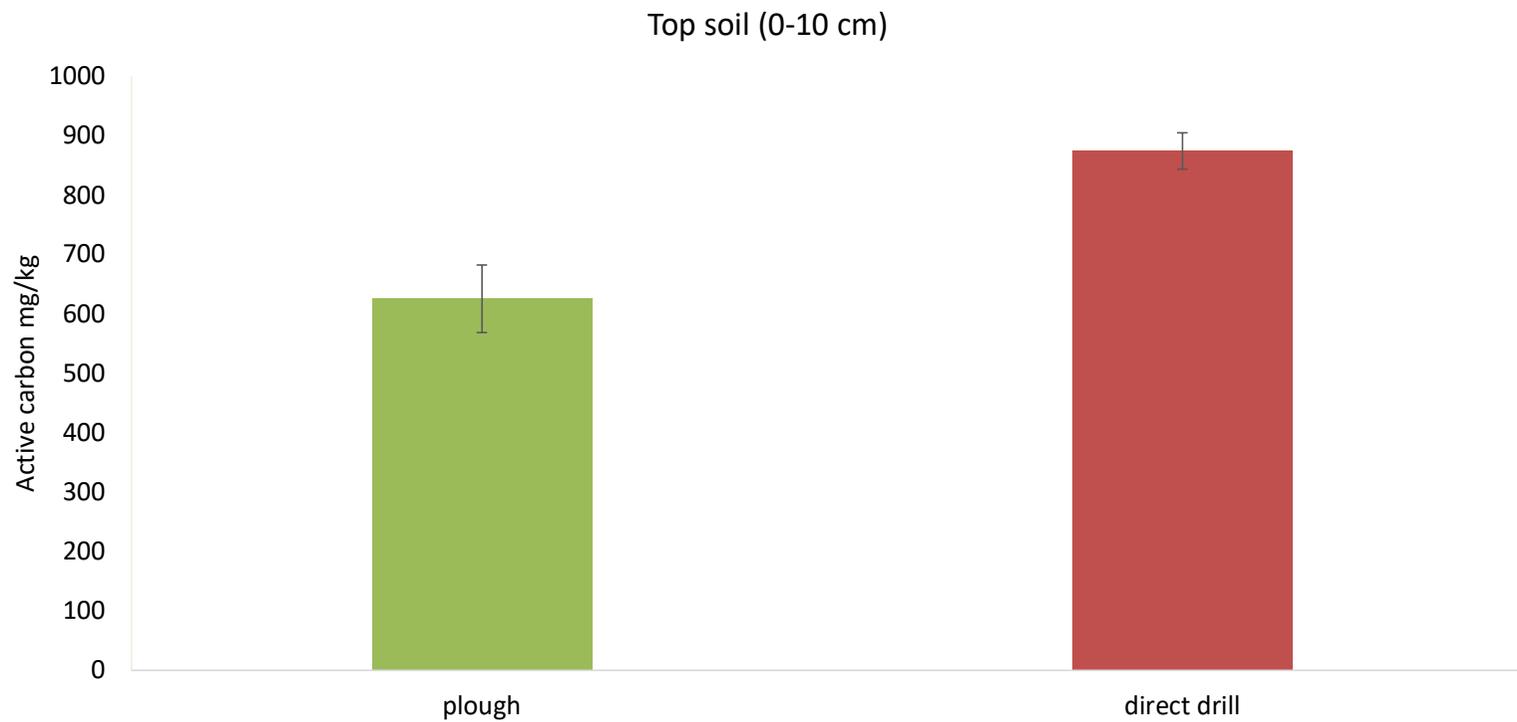
Short term direct drilled field - 5 years



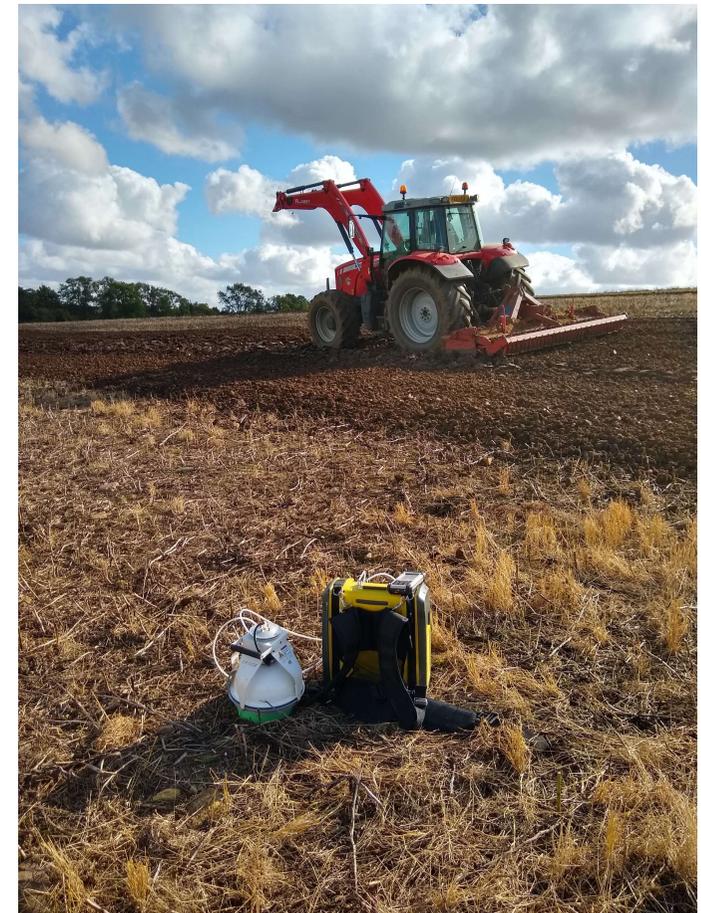
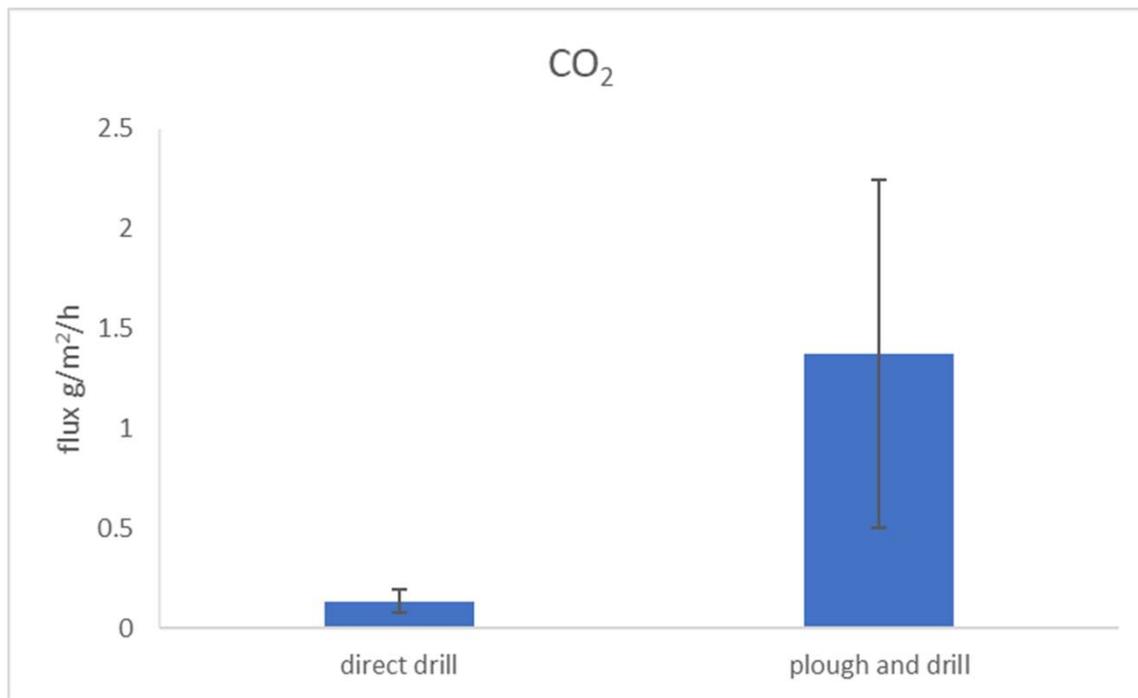
Long term direct drilled field <10 years



Long term direct drill - More active carbon

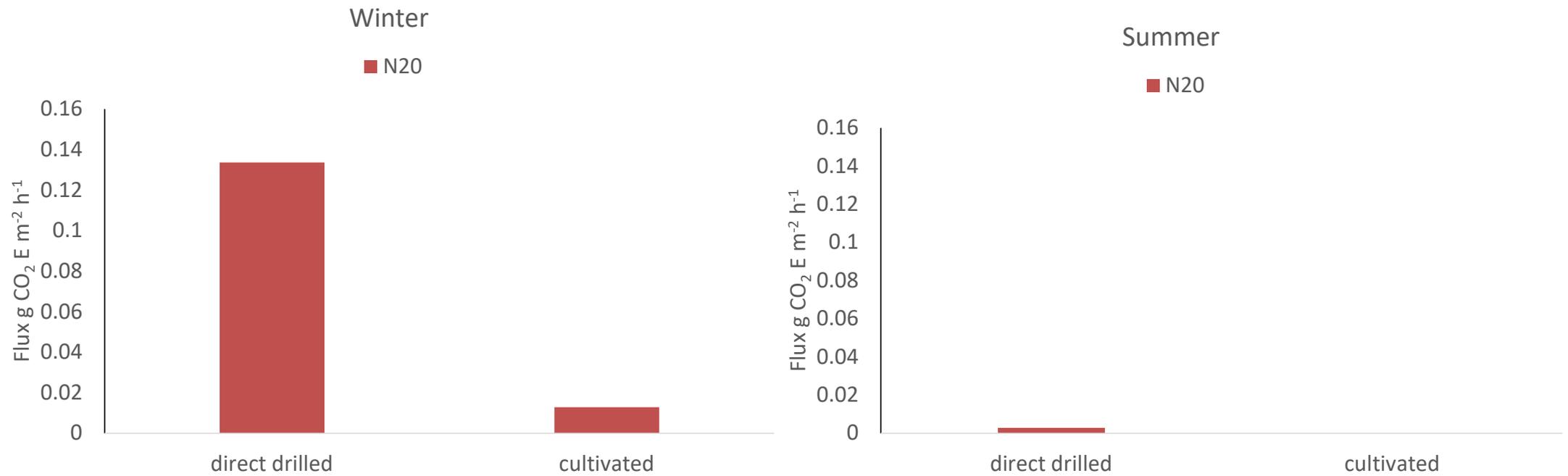


Where are the carbon losses?





Compaction and N₂O



Summary

- ▶ Different soil types come with different challenges and benefits.
- ▶ Soil management can change SOC storage
- ▶ The key drivers for changes in soil function are the soil biology.
- ▶ N_2O is important to consider along with C_2O

