

CSTS visit.

Norbury Park Estate, BIFoR (Birmingham Institute of Forest Research and FACE (Free Air Carbon Enrichment facility) Staffordshire.



Aerial view of the BIFoR FACE Facility



Tuesday 16th April 2024

Leaving 8.15 am returning 7.00 pm.

Norbury Park Estate is 2,100 acres of woodland and farmland in Staffordshire. Purchased by Professor Jo Bradwell in 2009, it is managed as a private 'carbon storage project', harnessing and maximising the potential of trees and soil to sequester CO₂. Around 500,000 trees have

been planted and a range of innovative forestry practices and research developed, notably around planting diverse intimate mixtures and nitrogen fixing species.

A philanthropic grant to Birmingham University led to the creation of BIFoR and the internationally important FACE experiment based on the estate. All the agricultural land has been converted to multi species herbal leys and 'mob grazing' system.

We will start the visit at the BIFoR FACE experiment, which was "switched on" on 3rd April 2017 to address the impact of climate and environmental change on woodlands. The fundamental research questions are:

- How does elevated CO₂ change carbon flows and storage, nutrient cycles and water use?
- How does elevated CO₂ change biodiversity and ecosystem structure and function?
- How does elevated CO₂ affect susceptibility to biotic and abiotic stress?.

CO₂ is pumped around trees to simulate the predicted levels of 2050, to learn about the effects of increased CO₂ and help plant woodland most likely to thrive in the future. See <https://www.thinglink.com/mediacard/1468559255387766787>

We will then have lunch at the Long Barn, followed by a **tour of the estate** and a **Q&A** discussion. We will meet Professor Jo Bradwell and Steve Spencer, the Estate Director.

This special visit is possible thanks to an introduction by CSTS member John Cookson.

We plan to arrive at 11.00am , so need to leave Cirencester at 8.15am, we will leave to return about 4.00, so be back in Cirencester shortly before 7.00pm.

Details of the coach, pick up point, clothing advice and cost will be sent to those who would like to come, there are a maximum of 30 places, please email me at cajbs@hotmail.co.uk as soon as possible.

Chris Stevens

