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Carbon dioxide release from drained upland peat

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Peat is the UK's largest terrestrial store of carbon, and large areas have been drained to promote grazing, which has failed. Can restoring the high water tables, associated with upland peat, be used as a means of conserving carbon? If so then this can be used to offset the UK's carbon emissions in accordance with the Kyoto protocol as this peat is classified as managed land. However research has shown that gripped peat has turned from a sink to a source and this will have global implications. This study looks at the effects of water table restoration in a heavily gripped area at a well monitored site in the North of England. This study has measured CO2 and CH4 fluxes, and the drivers behind them, such as water table depth, temperatures, PAR, and vegetation. This study has measured the CO2 and CH4 fluxes from the peat surface using a series of collars and closed chambers. This study aims to answer the question of whether this site has turned from a sink to a source, and what the implications of this are for the wider scientific community.