

## **Phosphorus, sediment and colloid transfer from grassland – the GRASP project**

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The objective of the project is to provide mechanistic and fundamental knowledge that contributes to the Defra programme through adopting a multidisciplinary team approach focussed around three platform sites.

Specifically, the project will:

- Contribute fundamental knowledge to help budget losses
- Define new techniques for identification of colloids and sediment
- Improve mechanistic understanding of sediment, colloid and P transport
- Contribute to new models for understanding P transport through grassland soils

The poster gives an introduction to the GRASP project – a multi-discipline approach to understanding P, sediment and colloid transfers from grasslands.

It shows examples from:

- Plot scale erosion experiments
- Tracing sediment experiments using stable carbon isotopes and natural fluorescence
- Modelling of sediment and phosphorus
- Uncertainty evaluation of data and models using Generalised Likelihood Uncertainty Estimation (GLUE)
- Colloid and sediment characterisation using Flow Field-Flow Fractionation (FIFFF)