Project Summary

Hay Days: management of floodplain meadows for sustainable hay production Vicky Bowskill, PhD student, <u>victoria.bowskill@open.ac.uk</u>

Floodplain meadows are not only fantastically important for biodiversity, flood management and carbon storage, but also for agricultural production. These semi-natural meadows and their unique communities of flora and fauna have evolved as a product of summer haymaking and aftermath grazing that has taken place for hundreds, or even thousands, of years. Prior to industrialisation and the advent of artificial fertilisers, they were effectively the fuel pump for the livestock-driven economy, with natural nutrient inputs from river silts during annual flooding making them uniquely fertile. Since the second world war, that use has declined and some 97% of our wildflower meadows have been lost.

UK agriculture is being transformed, with a new Agriculture Bill and subsidies shifting towards a model of 'public money for public goods'. In order to revalue species-rich hay as part of a modern agricultural system, both as a useful crop and as a tool to achieve conservation goals, we need to better understand it.

In this project I will be looking at how factors such as mineral content and yield vary with cutting date and how calendar date compares to accumulated thermal time as a tool for predicting desirable hay characteristics. This is a mixed methods study and, in addition to this field work, I'll be exploring the acceptability of different haymaking approaches to stakeholders with a view to influencing policy and practice.

2020 will be the first field season for this study and the project will run until 2023.

