



Beauty and utility – restoration of floodplain meadows

Emma Rothero

Floodplain Meadows Partnership Outreach Co-Ordinator





**Species rich grasslands in the river floodplain that have a hay cut (lowland).
Traditional management + historic associations (Lammas meadows, Hams,
Ings etc)**





The (floodplain) meadow map

2980 ha remain

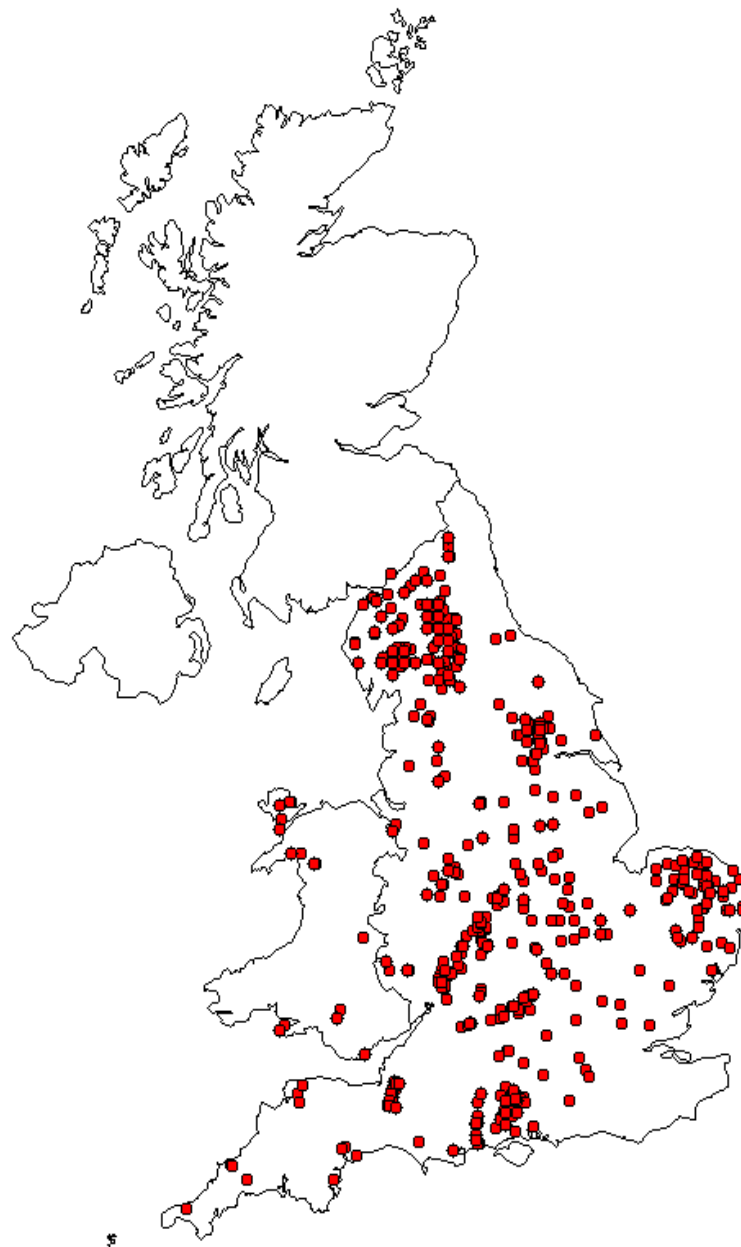
1350 ha MG4

1160 ha MG8

500 ha* the rest

Lower Derwent	190 ha
Lugg	132 ha
Portholme	104 ha
Oxford	85.6 ha
Clattinger	60.3 ha
Upton Ham	56.6 ha
Chimney	49.4 ha
Mottey	44.6 ha
North Meadow	44.4 ha

***MG14, MG15 and MG6d**





Centre for Ecology & Hydrology

NATURAL ENVIRONMENT RESEARCH COUNCIL



Environment Agency



The Open University

FSC

BRINGING ENVIRONMENTAL UNDERSTANDING TO ALL

Floodplain Meadows Partnership



National Trust

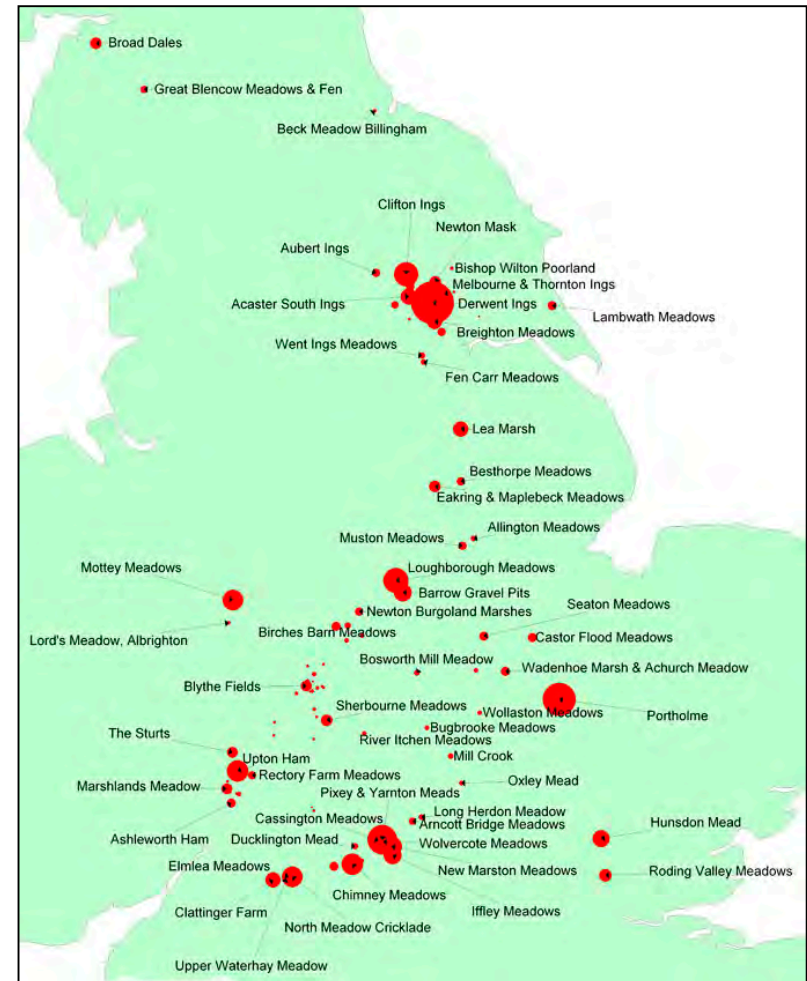


giving nature a home



Partnership Objectives

- Monitor floodplain meadow sites (SAC), maintain meadows database
- Encourage meadow restoration (and monitoring) schemes
- Develop outreach activities, training programmes, website etc
- Continue and encourage research
- **2015-2018 – visit restoration sites, survey, small capital fund available**



Why restore?

A sustainable system

- No fertilisers
- No chemicals
- Minimal machinery
- No/little water level management

Yet

- Species rich
- Historically interesting
- Water quality – silt/P
- Economic benefit
- Sustainably help deliver natural flood management



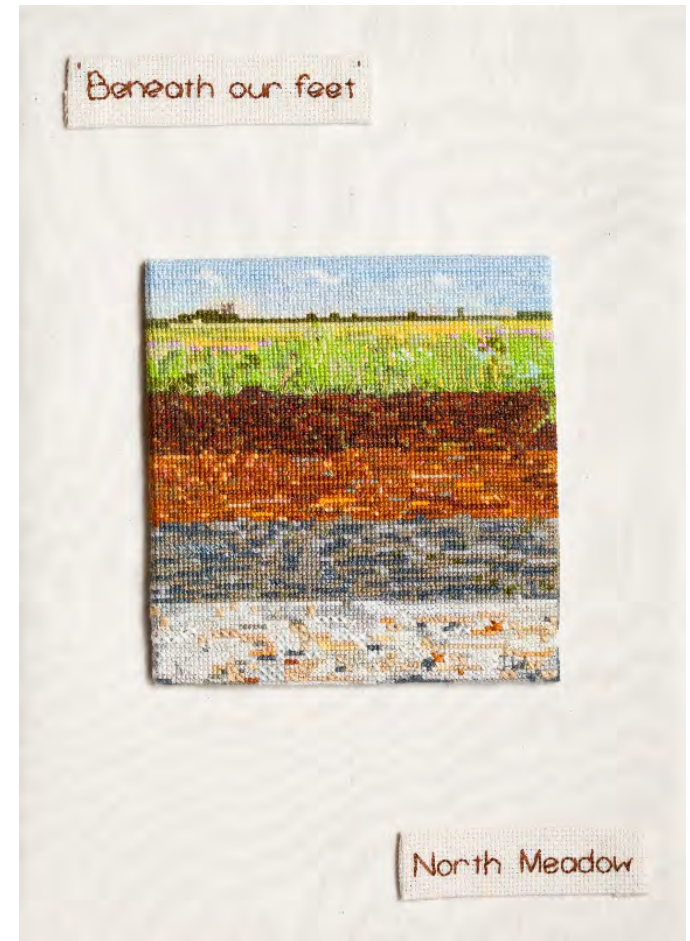


Restoration - Key considerations and pitfalls

Floodplain location brings complexities

- Nutrient budget
- Soil structure
- Soil-water levels
- Farm management needs

Jean Widdows



The value of (even basic) pre-restoration information

	Ideal range for restoration/creation	If not...
Soil fertility	5-25 mg/l P	Two hay cuts a year over a number of years will reduce P levels.
Soil pH	pH > 5.5	Look at flood regime. Look elsewhere.
Soil water levels and flooding	Roughly matching those described in FMP handbook for (e.g.) MG4 or MG8 type community.	Look at internal drainage grips and management of structures
Soil texture and structure	Good soil structure (not compacted), soil profile indicates fluctuating water levels in appropriate zone.	If soil is compacted, may not be worth attempting restoration.

Nutrient budget

Soil P within range

Post restoration management –
depends on flooding.

Consider multiple cuts in first year
(manage nutrients and stabilise
sward)

Lambwath SSSI

Soil P?

Flooded after hay spread

Needs a cut

Broad Meadow, Northants

Olsens P 16 mg/l⁻¹

Previously arable



2015

Soil-water levels and flooding

Priors Ham - modelled - within range for MG4

Seed and hay from North Meadow 2010, seed 2011

Flooded for 10 months 2012/13

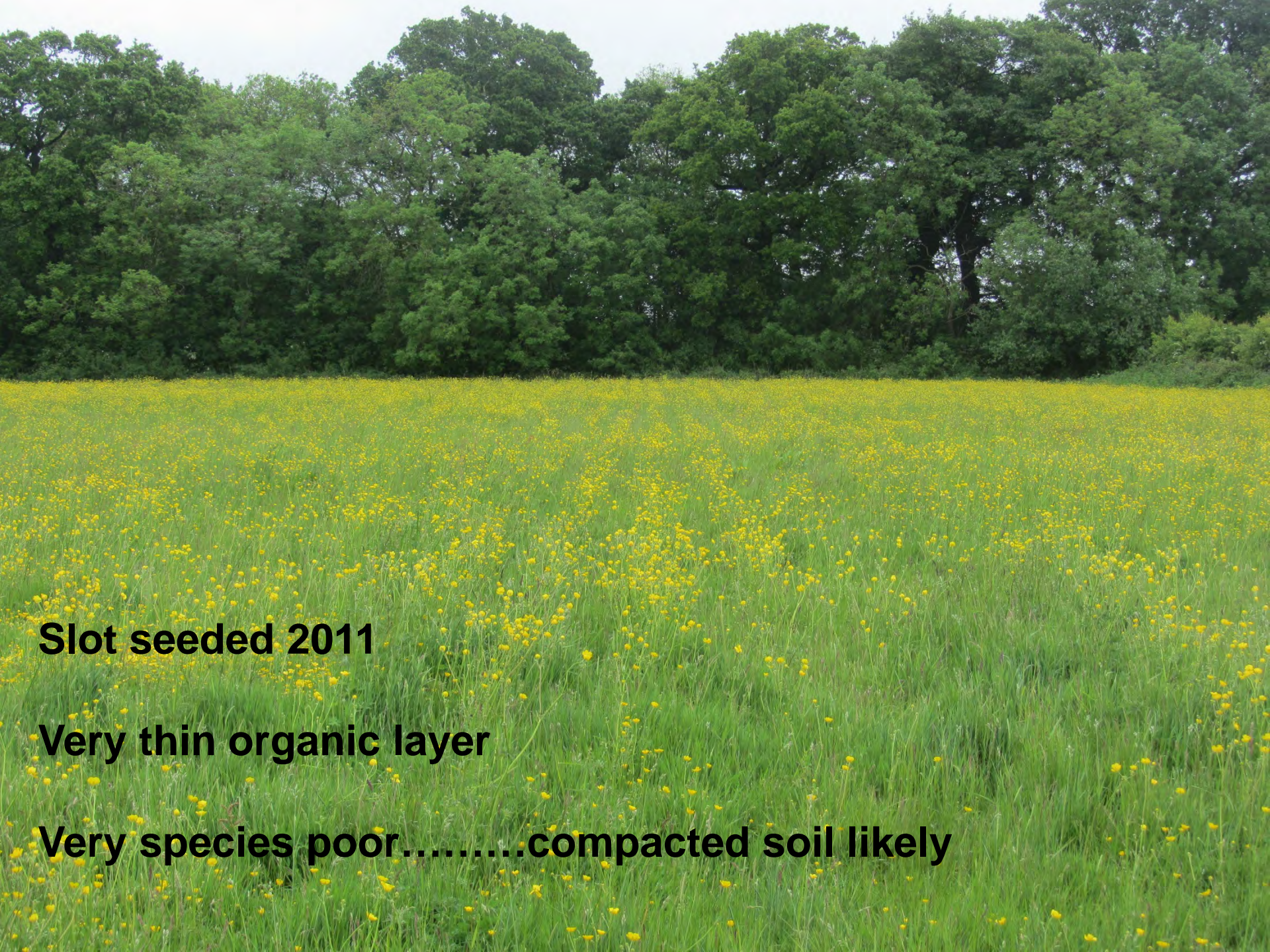


Soil compaction

If evidence (plants) indicates compaction, soil pit.

If compacted – drainage, FYM, sub-soiler, hay cut





Slot seeded 2011

Very thin organic layer

Very species poor.....compacted soil likely



0-10cm loamy, dark with some clay

10-20 cm loamy for $\frac{3}{4}$ then more clayey

20-30 cm more clay but still some brown loam

30-50 cm clay

50-60 cm clay with some mottling

60-70 cm clay with 1 piece gravel, increasing sand

70-90 cm increasing sand and gravel



The Wildflower Meadow River Thames

- 15 years
- Seed spread
- Perfect soil profile



Church Farm
38 years



Swill Brook Meadow
6 years





n restoration

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Home

Welcome to the Cricklade Court Leet website

The Manorial Court of the Hundred and Borough of Cricklade

The Cricklade Court Leet is one of the few remaining active Court Leets in the United Kingdom.

The Manorial Court for the Hundred and Borough of Cricklade has existed in Cricklade since the 14th Century and is one of only 32 that remain in the country today. Its original duties are now dealt with by the Local Authorities and Magistrates, but the Court does retain responsibility for managing the grazing of Cricklade's National Nature Reserve 'North Meadow'.



Established in Saxon times each man was recorded as a member of 10 men. Each ten had a leader responsible for the conduct of the other nine. In turn ten groups formed a 'Hundred' and the leaders elected one of their number to be the 'Hundredsman'. Tens and hundreds were responsible for

catching and punishing thieves from amongst their number and compensating victims. Thus the first form of community policing was born. The system underwent a change with the coming of the Normans. The Court became a Manorial Court which dealt with petty offences and collected fines and taxes. The chief officer of the Court is now the 'High Bailiff' who replaces the role of Town Mayor. Executive powers, however, remain with the Chairman of the Town Council.

The officers of the Court are still active today as shown above on official duty in the

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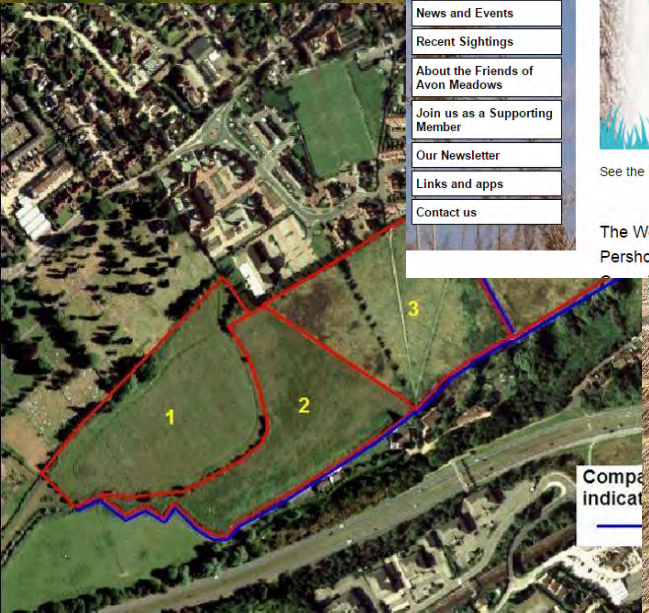


osite of the Avon Meadows Community Wetland reserve in Pershore, Worcestershire.



See the News and Events page for details!

The Wetland was established in 2008 jointly by Pershore Town Council and Wychavon District

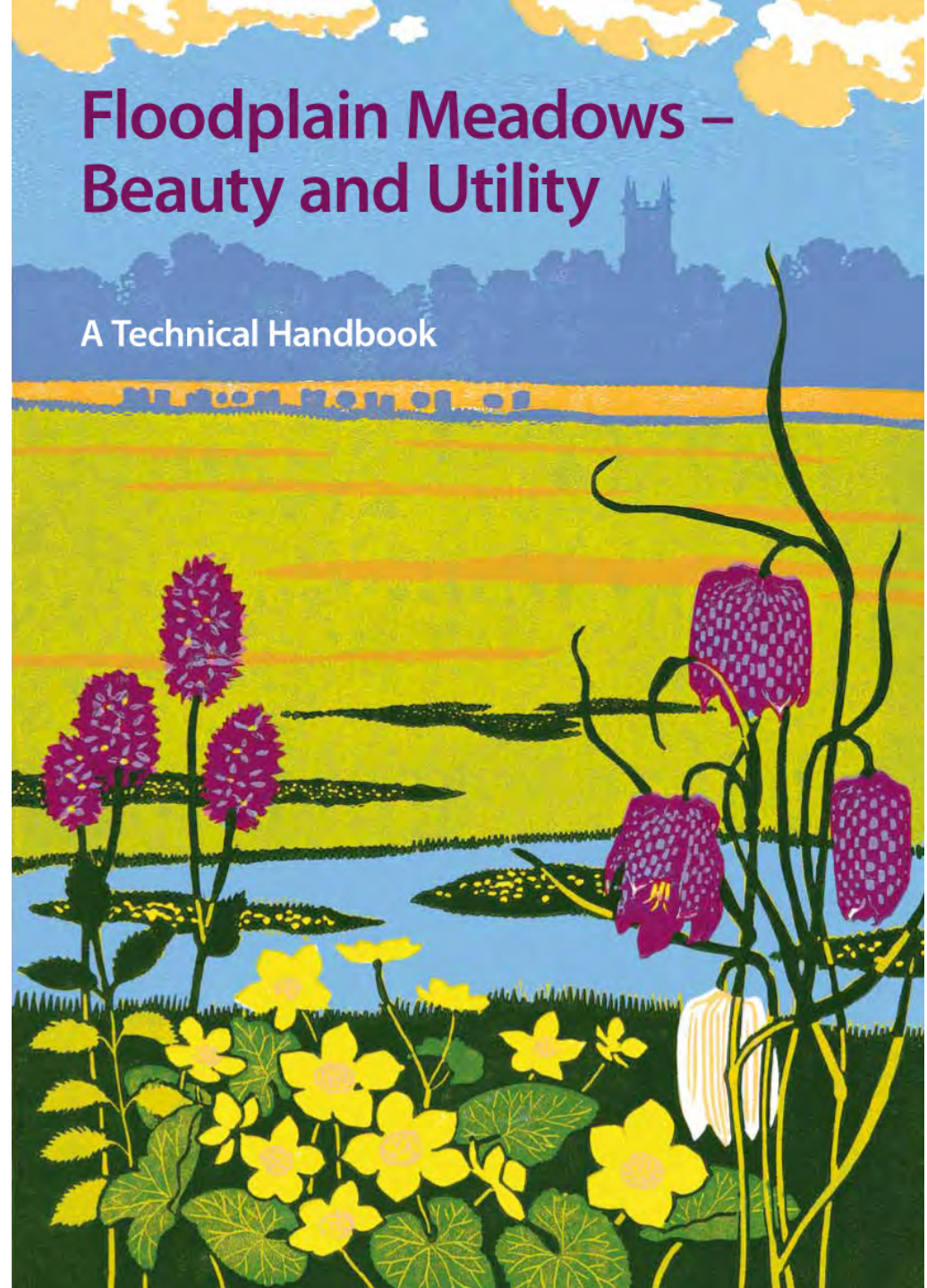


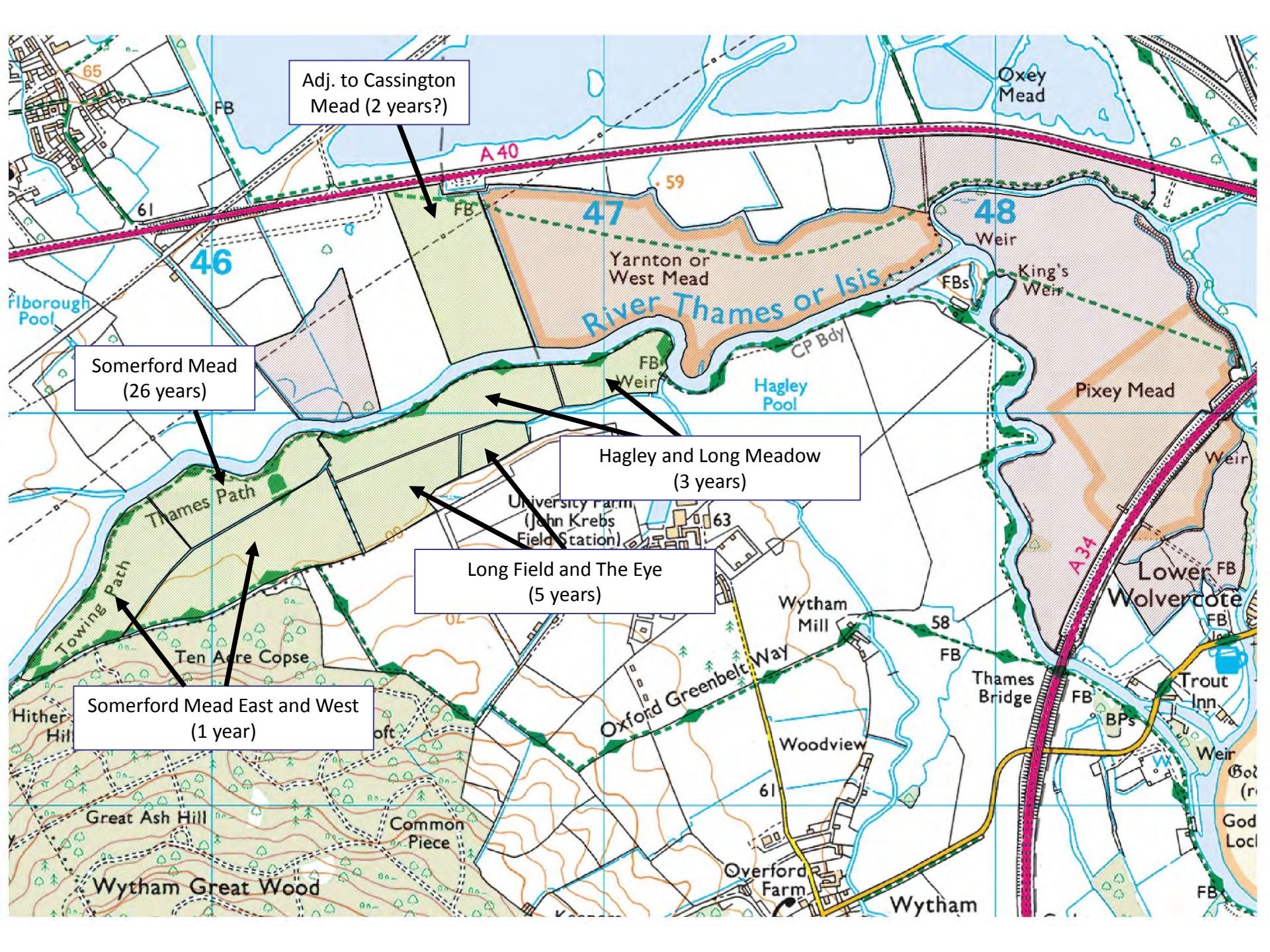
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Mr PETER BIALEK, landowner and Managing Director of CB Skips, Laverstock for his very generous support of the farm from inception in 2009 and throughout its development. Without his continued support, the farm would be a far less ambitious project

River Bourne Community Farm, 01722 330667

Hints, tips, case studies,
photos...





Adj. to Cassington Mead (2 years?)

Somerford Mead (26 years)

Long Field and The Eye (5 years)

Hagley and Long Meadow (3 years)

Somerford Mead East and West (1 year)



The Team and Funding

Project Staff

Project Director - Prof. David Gowing.

Esmee Fairburn Foundation (2008-2017) and John Ellerman (2015-2018)

Co-Ordinator posts

Research Co-ordinator
Outreach Co-ordinator

Dr. Irina Tatarenko
Emma Rothero

Key contractor Hilary Wallace

Current PhD students

- Laura George
- Melanie Stone

Daphne Jackson Fellowship

- Dr Clare Lawson (carbon storage in floodplain soils)

Other funding

- Garfield Weston Foundation-supported survey works (2006)
- Light Owler Trust contributions from 2008-2011
- ALSF funded modelling and capital work, Wiltshire 2008 and 2009
- Consultancy and contract work; Environment Agency, Natural England, Gravel Companies, Development companies, Wildlife Trusts, RSPB



Esmée
Fairbairn
FOUNDATION

