Site Visit Assessment Form – FAI farms, Oxfordshire: Hagley Field



Site Name	Grid Ref	County	
Hagley	SP467099	Oxfordshire	
Catchment	Ownership	Designation Size (ha)	
Thames	FAI farms	None	1.54
Date	Meeting with	Managed by	
26 th May 2016	No-one	FAI Farms	
May 2018	No one 2018		

Management and History

Agri environment agreement

AG00340415 HK7 (but hasn't come up on our list of AE agreements from NE for some reason).

Current management

Hay cutting approximately 1 year in 3, then aftermath grazed, or grazed for a minimum of 6 weeks between May and September.

Restoration

Technique used/Dates

Green hay spread from Pixey in 2013 Planned to graze in 2014 and hay cut 2015.

Hydrology	Floods regularly, groundwater movement
Flooding regime	through gravels.
Water management	
Soil-water levels (indicated by	
auger hole/any other data)	

Historical information

None known

Current site interest Attach excel spreadsheet for botanical data

In 2012, vegetation on Hagley was represented by up to 90% cover of perennial ryegrass *Lolium perenne* and up to 30% creeping bent grass *Agrostis stolonifera* (Mc Donald, 2012). In 2013-2016, the vegetation changed from the weedy dominated NVC community OV21 *Poa annua-Plantago major* to the more typical grassland communities MG7, MG9, MG10 and MG11 – all scored just above 51%. This indefinite score and the mixture of apparently different communities can be explained by the early transitory stage of this grassland.

The species richness of the quadrats almost doubled over three years: from 5-10 in 2013 up to 9-15 in 2016. The appearance in the sward of such species as ribwort plantain *Plantago lanceolata*, common knapweed *Centaurea nigra* and common sedge *Carex nigra*, looks very promising, however overall dominance of grasses remains, possibly preventing more forbs from establishing. The weedy species, annual meadow grass *Poa annua*, which dominated on many plots in 2013, was replaced by rough meadow grass *Poa trivialis* in 2016 showing cover of up to 80%. Another dominant species, perennial ryegrass *Lolium perenne*, decreased its projected cover from 60% in 2013 down to 20% in 2016, which also reflects a positive trend in the community. Among other encouraging signs on the restoration fields, the slight decrease in Ellenberg scores for fertility reflects some success in decreasing level of nutrients in the soil on Hagley from 6.2 down to 5.84.

2018 re-survey

Quadrats were not re-surveyed here as the field was grazed in 2018 grazed. Instead, a species list was recorded on a walk-through approach. 13 species were recorded in 2013, 19 species in 2016, and 14 in 2018, with an increase in 2018 of creeping thistle *Cirsium arvense* and spear thistle *C. vulgare*.

Phosphorus levels	21.6 mg/kg ⁻¹ in 2013. Not recorded in 2016
Soil auger photo and findings	None taken

Site manager aspirations/objectives

A more species-rich meadow as part of the HLS objectives. Also need somewhere to summer graze, hence the rotating hay cut.

Management recommendations

An annual hay cut would be better for the species diversity if alternative grazing can be found from April-June. An option might be to cut earlier (June) and then aftermath graze, giving more grazing time later in the year. This is especially important in the early phase of a restoration project when the nutrient removal of the hay cut allows the sward to diversify. Another option would be to graze the

initial growth in April/early May, then shut up for hay in mid-May and then cut after just 6 weeks, then graze again.

Table 1. Summary of botanical data 2016 from Hagley.

	Hagley	
	2013	2016
Ellenberg F	5.1	5.76
(moisture		
tolerance)		
Ellenberg N	6.2	5.84
(fertility)		
Ellenberg R (pH)	6	6.1
Species/quadrat	7.8	12.2
(mean and range	(5-10	9-15)
/1 m x 1 m)		
Ratio	2.5	0.9
dicots/monocots		
NVC (top 2 MAVIS	OV21b	MG10a
subcommunities)	OV21	MG7D

Table 2. Soil properties on the Oxford restoration fields, 2013.

Field	Quadrat	Soil-pH	Total-P, %	Olsen-P, mg/kg PO4-P
Long Field	N719	7.8	0.136	35.1
Long Meadow	N707	7.5	0.125	13.0
The Eye	N713	6.9	0.144	30.0
Hagley	N703	<mark>6.5</mark>	0.133	<mark>21.6</mark>