Site Visit Assessment Form – FAI farms, Oxfordshire Long Meadow/North Meadow



Site Name	Grid Ref	County		
Long Meadow or North Meadow	SP464098	Oxfordshire	Oxfordshire	
River	Ownership	Designation	Size (ha)	
Thames	FAI farms	None	4.66	
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. Need to check.

The restoration fields on FAI Farm owned land cover four historic floodplain meadows which were previously used as pasture. Long Field and The Eye are situated next to the river Thames, across the river from Yarnton Mead SSSI. The restored and species-rich Somerford Mead has a short common border with Long

Field and The Eye, and with Somerford Mead East; the latter being added to the restoration project in 2015.

The other two fields, Long Meadow and Hagley are both located further away from the river. They are most likely affected by the neighbouring field called The Flushes, which has groundwater seepage and saturated soil.

The restoration sites were botanically surveyed in 2012, the year after strewing green hay (McDonald, 2012). The sites were resurveyed in 2013. The quadrats recorded in 2012 were re-found with reasonable accuracy and re-recorded with a highly accurate differential GPS. Some of the quadrats recorded in 2012 appeared to be on the track in 2013, so the closest feasible areas were surveyed instead.

Hydrology	Floods regularly, groundwater movement
Flooding regime Water management Soil-water levels (indicated by auger hole/any other data)	through gravels. Drier towards river as bank raises slightly. Water drains towards the back (southern) ditch.
Historical information	
None known	
Current site interest	Attach excel spreadsheet for botanical data

Long Meadow similar to Hagley is located further away from the river. It is most likely to be affected by the neighbouring field called The Flushes, which has groundwater seepage and saturated soil.

In 2012, the Long Meadow was dominated by creeping bent grass *Agrostis stolonifera* (up to 90%PC), perennial ryegrass *Lolium perenne* (up to 60%) and creeping buttercup *Ranunculus repens* (up to 30%) (McDonald, 2012). The field was not surveyed in 2013. According to the survey in 2016, the community could be classified as MG10. The overall number of species recorded on the field increased from 13 in 2012 (McDonald, 2012) up to 33 in 2016; with species richness varying from 8 to 16 species per square metre on the different plots. The site is the wettest and most fertile among all fields recorded in the FAI Farms restoration sites complex. The Ellenberg indicator score for soil fertility averages N=6.24 with a maximum value of N=6.8.

The field had a low species diversity and a feel of compaction. This may be due to heavy grazing after green hay was spread. These two fields (Long Meadow and Hagley) also sit wetter than the others.

2018 re-survey

Quadrats were not re-surveyed here in 2018 as they were grazed. Species lists were recorded on walk-through approach. 31 species were found on 7 quadrats recorded in 2016, but 21 species in 2018. The lower species number recorded in 2018, could be because of difficulties in recording in grazed vegetation.

Phosphorus levels	June 2010 gave P level of 11 mg/l ⁻¹
Soil auger photo and findings	

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 species diversity if alternative grazing areas from April-June could be found. Perhaps rather than cut late (after mid-July), an earlier cut (end June) and then aftermath grazing might be an option. Would give more grazing time later in the year. Consider looking at drainage.

	Somerford Mead East	Long Field	The Eye	Long Meadow
Ellenberg F (moisture tolerance)	5.56	5.5	5.77	6.2
Ellenberg N (soil fertility)	5.06	5.7	5.7	6.2
Ellenberg R (pH)	6.32	6.3	6.17	6.0
Species/quadrat (mean/1 x 1 m ² and range)	4-15	16.8 (10-23)	12.7 (10-16)	12.8 (8-16)
Ratio dicots- monocots	0.75	1.26	1.1	1.07
NVC (top 2 MAVIS subcommunities)	MG6a MG6	MG6a MG6	n/a not enough quadrats	MG10b MG10

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	<mark>7.5</mark>	0.125	13.0
The Eye	N713	6.9	0.144	30.0
Hagley	N703	6.5	0.133	21.6