

Site Visit Assessment Form – Tewkesbury Nature Reserve 2, Gloucestershire



Site Name Tewkesbury Nature Reserve Field 1	Grid Ref SO900317	County Gloucestershire	
River Swilgate (Severn)	Ownership Tewkesbury Town Council	Designation None	Size (ha) 2.69
Date 28 th June 2017	Meeting with Cathy Beeching (EA), Caroline Corsie, Joanna Rutherford (Volunteer), Larry Blacker (TNR Limited Reserve Manager), Anna Ellen (EA and volunteer), Les Buchanan (Chair of Trustees), Ken Pomfret (FMP Ambassador)	Managed by Tewkesbury Nature Reserve Ltd Trust?	
Management and History			
Agri environment agreement			
Yes – not sure of details			
Current management			

Restoration	
Technique used/Dates	
<p>The field was an ex-arable ley, which was then re-shaped to create a pond area and meadow around it. Started restoration in 2015. Used herbicide – ‘Round up’. Disked over construction area, but were concerned that it was wet and cold when some of the construction work was done (compaction risk)? Did put some top soil on it after construction of ponds was finished. Green hay was used from Hucclecote Meadow. Not sure of extent of re-seeding in this field.</p>	
Hydrology	Field is within the floodplain but not official flood storage area and not controlled. Flooding is backflow from the Severn and Avon rather than the smaller Swilgate Brook. Site floods annually. Have some trial pits dug which suggest blue lias clay. In June the groundwater was 1 m below ground. Thin layer of top soil only. Some stones are found in the clay but not big gravel lenses. All fields have clay underdrains, these have been removed so flow /drainage is now interrupted. Water ran straight into the stream, so have intercepted drains around a reedbed. Old drains (late 1800’s)
Flooding regime Water management Soil-water levels (indicated by auger hole/any other data)	
Historical information	
Was arable tried to grow maize, probably arable for 30 years.	
Current site interest	Attach excel spreadsheet for botanical data
<p>Compared to field 1, the restoration success is more modest, being closest to MG6 - <i>Lolium perenne-Cynosurus cristatus</i> grassland but not very conclusive. However this is to be expected on a restoration site at the early stages. Red clover <i>Trifolium pratense</i> is one of the most dominant species with cover reaching 90% in places. However it doesn’t tend to compete with other species and will reduce its cover with time. A range of target species seemed to have established themselves successfully. The field is less species rich than field 1 although similar in Ellenberg F and N scores, suggesting that the soil fertility and wetness are similar in each field.</p>	
Phosphorus levels	P index 2-3 – Cathy Beeching can provide accurate P data.
Soil profiles	
No profile taken as the soil has been re-shaped here.	
Site manager aspirations/objectives	
Species rich meadow	
Management recommendations	
<p>As for field 1 continue with current management. A timely hay (June) cut is important to keep on top of the nutrients. Two hay cuts a year could be considered here if grazing is hard to find. Timely hay cuts and prevention of water logging will be the keys to continued success here.</p>	

Tewksbury		
	Field 1	Field 2
Ellenberg F (moisture tolerance)	5.38	5.44
Ellenberg N (fertility)	5.4	5.36
Ellenberg R (Reaction)	6.4	6.56
Species/quadrat (mean and range /1 m x 1 m)	17.6 (13-22)	12.8 (11-15)
NVC (top 2 MAVIS subcommunities)	MG4v2 MG4b	MG6a MG6