

Site Visit Assessment Form – Aldwincle Field 1, Northamptonshire



Site Name Aldwincle Field 1	Grid Ref TL018820	County Northamptonshire	
River Nene	Ownership Lillford Estate (Society of Merchant Ventures)	Designation Local Wildlife Site	Size (ha) 4.12
Date 22 June 2017	Meeting with Matt Johnson and Tim Hankins Plus Pete Stroh (BSBI). David Gowing, Emma Rothero and Irina Tatarenko	Managed by Tim Hankins	
Management and History			
Agri environment agreement			

Fields went into Countryside Stewardship in early 1990's under an arable reversion scheme. Had 2 lots of 10 year blocks of CS and are now in the 5th year of an HLS agreement.

Trees were planted in the middle of field in 1999 (cricket bat willows). Grow in 9-13 years, but not done so well in this field. Do better along the river bank. Objective in this field is for birds. Have visiting snipe and curlew are in the area. Also reed warblers, barn owls etc.

Current management

Cut and aftermath grazed every other year, otherwise is grazed (aftermath grazing till November, aiming for about 2 inches of grass to be left). If cut, gets mown 15th July onwards, and grazed till November. If grazed cattle are put on after 15th May till November. Don't cut for hay among the trees.

Restoration

Technique used/Dates

Initially left land to regenerate naturally then took hay bales from adjacent meadow. Hay was cut (mid-July) and stored, then spread in October of the same year. Greened up quite quickly, and sheep were grazed. Topped with a tractor to control docks. For two years in a row put hay on from adjacent field, letting sheep spread it around. Since then field has been cut and aftermath grazed every other year, otherwise is grazed (aftermath grazing till November, aiming for about 2 inches of grass to be left).

Hydrology

Flooding regime
Water management
Soil-water levels (indicated by auger hole/any other data)

Meadows grow well through the summer which suggests some GW irrigation. The site does flood regularly, but water doesn't sit long enough on site to result in grass kill. Controlled river levels on the Nene might help. Ditches all around the site tend to be the main drainage path. Landowner thinks water moves off quite quickly.

Historical information

This field was historically a meadow, but was then ploughed and cropped. The landowner took over the farm in 1982 (ish) and tried to crop it for a couple of years (spring rape/wheat) but flooding was a problem.

Current site interest

Donor site has lower soil fertility but higher wetness and pH than any of three restoration fields. Very high abundance of Yorkshire fog *Holcus lanatus* on the donor field doesn't occur on Alwinckle 1 field where creeping bent grass *Agrostis stolonifera* substantially dominates over other species across most of the field. The presence of Yorkshire fog *Holcus lanatus* and other species related to MG4 *Holcus lanatus* sub-community have led to a reasonably high score in MAVIS for this community (53.95%). However, the top score (56%) belongs to MG15a - *Alopecurus pratensis-Poa trivialis-Cardamine pratensis* grassland, *Agrostis stolonifera* subcommunity.

In general, vegetation on the field is quite uneven. The area next to the double line of trees across the meadow, where no hay cut is taken, is shaded and dominated by very large tussocks of tufted hair grass *Deschampsia caespitosa* over 1 m tall and hard rush *Juncus inflexus*, again over 1 m tall and 2 m wide. These make it almost inaccessible for grazing animals; there are many docks. Areas away from the trees are very grassy, with patches of couch grass *Elytrigia repens*, rough-stalked meadow grass *Poa trivialis*, wavy hair grass *Deschampsia caespitosa*, and an overall dominance of creeping bent grass *Agrostis stolonifera*. The area is relatively species poor (7-10 species per 1 sq m). Vegetation on a narrow strip along the river is more diverse with up to 19 species on quadrat 119 (see the map). A small area of typical meadow species was noticed in the corner of q 121. In this area creeping buttercup *Ranunculus repens* dominated, but there were also species such as yellow oat-grass *Trisetum flavescens*, ragged robin *Lychnis flos-cuculi* and Timothy grass *Phleum pratense*, suggesting the drainage and soil structure were effective in this area of the field.

Surveyed in 2015 by Wildlife Trust (Matt Johnson) and 2008 (Wildlife Trust) but after the hay cut

Phosphorus levels	Not known
--------------------------	-----------

Soil profiles

	<p>Soil profile from Quadrat 116</p> <p><i>A horizon</i> 0-20 cm, active root zone, plenty of organic matter</p> <p><i>B horizon</i> 20-40 cm Silty clay, river deposit. Pale clay, uniform distribution of organic material 50 cm grey clay. Indicates that water table sits at 40-50 cm.</p> <p>50 cm-120 cm. Grey clay, permanently waterlogged</p>
--	---

Site manager aspirations/objectives

Deliver agri environment agreement

Management recommendations

For a more species rich meadow, annual cutting works more effectively. At the moment, the areas under *Deschampsia caespitosa* and *Juncus inflexus* are not suitable even for grazing. Keep drains well maintained. If a species rich meadow is an objective, then a change in management and consideration of further green hay spreading may be sensible. The soil-water levels in the area of the auger suggested that the water sits at about the right height for a more species rich meadow.

Aldwinckle			
	Field 1	Field 2	Field 3
Ellenberg F (moisture tolerance)	5.8	5.44	5.72
Ellenberg N (fertility)	5.6	4.96	5.56
Ellenberg R (Reaction)	6.4	6.12	6.04
Species/quadrat (mean and range /1 m x 1 m)	10.7	16.3	13.5
NVC (top 2 MAVIS subcommunities)	MG15a MG4c	MG6a MG6d	MG4b MG4v2