

Appendix 3: Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015
(relevant to Appendix 1)

PART 1 of table

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk (B*), SP54753 05878 to SP54767 05853 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species

Undesirable species

☆ Quadrat positions for 2013 interrupted belt transect

		Ash stump													
Metres along transect A-B from point A*		0m	1m☆	2m	3m	4m	5m☆	6m	7m	8m	9m	10m☆	11m	12m	13m
Visibly wet at surface?		wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet
Bare mud/peat percent		10	90	80	90	80	70	50	60	10	10	5	20	30	20
Iron oxide or tufa or peat?		Iron ox/peat	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat	peat	tufa	tufa	tufa
Dying black reed *								*							
A toxicity or low-nutrient phenomenon?															
SPECIES	COMMON NAME														
<i>Phragmites australis</i>	Common reed	90	100	90	100	90	90	70	35	15	10	2	5	1	10
<i>Juncus subnodulosus</i>	Blunt flowered rush						5	20	40	20	50	4	2	10	15
<i>Agrostis stolonifera</i>	Creeping bent grass	5									0.1				0.1
<i>Filipendula ulmaria</i>	Meadowsweet														
<i>Holcus lanatus</i>	Yorkshire fog														
<i>Eupatorium cannabinum</i>	Hemp agrimony					5	4	5	2	0.1	5			2	1
<i>Equisetum palustre</i>	Marsh horsetail								0.1	0.1			2	2	
<i>Cirsium palustre</i>	Marsh thistle						1			1	1				1
<i>Carex panicea/flacca</i>	Carnation sedge								5	30	20	25	40	40	60
<i>Molinia caerulea</i>	Purple moor grass									25	30	50	15	40	15
<i>Mentha aquatica</i>	Water mint	5			0.1	1	5	10	5	5	2			0.1	
<i>Pedicularis palustris</i>	Marsh lousewort											15	20	5	
<i>Valeriana dioica</i>	Marsh valerian														

* Relates to locations on the sketch map

Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **PART 1 of table**

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk (B*),
 SP54753 05878 to SP54767 0585 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY:

Valuable calcareous fen species

Undesirable species

☆Quadrat positions for 2013 interrupted belt transect

		Ash stump													
Metres along transect A-B from point A*		0m	1m☆	2m	3m	4m	5m☆	6m	7m	8m	9m	10m☆	11m	12m	13m
Visibly wet at surface?		wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet
Bare mud/peat percent		10	90	80	90	80	70	50	60	10	10	5	20	30	20
Iron oxide or tufa or peat?		Iron ox/peat	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat	peat	tufa	tufa	tufa
Dying black reed *								*							
A toxicity or low-nutrient phenomenon?															
SPECIES	COMMON NAME														
Oenanthe lachenalii	Parsley water dropwort							10	15	10	5			5	1
Calystegia sp	Great bindweed														
Poa trivialis	Rough-stalked meadow grass	2													
Arrhenatherum elatius	False oat grass	1													
Epilobium hirsutum	Great willowherb	2													
Scrophularia auriculata	Water figwort					5	5								
Rubus fruticosus	Bramble	10													
Galium aparine	Cleavers	2													
Epilobium parviflorum	Hoary willowherb	5													
Pulicaria dysenterica	Fleabane														
Hypericum tetrapterum	Square-stalked St John's-wort														
Angelica sylvestris	Wild angelica														
Carex lepidocarpa	Long-stalked yellow sedge												5		
Epilobium palustre	Marsh willow-herb												1		

* Relates to locations on the sketch map

Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **PART 1 of table**

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk (B*),
 SP54753 05878 to SP54767 0585 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY:

Valuable calcareous fen species

Undesirable species

☆Quadrat positions for 2013 interrupted belt transect

		Ash stump													
Metres along transect A-B from point A*		0m	1m☆	2m	3m	4m	5m☆	6m	7m	8m	9m	10m☆	11m	12m	13m
Visibly wet at surface?		wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet
Bare mud/peat percent		10	90	80	90	80	70	50	60	10	10	5	20	30	20
Iron oxide or tufa or peat?		Iron ox/peat	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat	peat	tufa	tufa	tufa
Dying black reed *								*							
A toxicity or low-nutrient phenomenon?															
SPECIES	COMMON NAME														
Juncus inflexus	Hard rush	20	10												
Solanum dulcamara	Bittersweet	10	5												
<i>Urtica dioica</i>	<i>Common nettle</i>	2													
Cardamine sp indet	Cuckoo flower/wavy bittercress														
BRYOPHYTES															
Pellia endiviifolia	Endive pellia liverwort					5	5								
Brachythecium rutabulum	Rough stalked feather-moss														
Cratoneuron filicinum	Fern-leaved hook-moss			10	10	10	90	90	20	0.1	0.1		5	10	2
Calliergonella cuspidata	Common spear-moss								2	0.1	5	5	5		20

End of Part 1 of table

* Relates to locations on the sketch map

Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **PART 2 of table**

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk, (B*)
 SP54753 05878 to SP54767 05853 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species

Undesirable species

☆ Quadrat positions for 2013 interrupted belt transect

Metres along transect A-B from point A*	14m	15m☆	16m	17m	18m	19m	20m☆	21m	22m	23m	24m	25m☆	Boardwalk 26m
Visibly wet at surface?	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	
Bare mud / peat percent	10	5	40	60	50	30	40	30	40	60	50	5	
Iron oxide or tufa or peat?	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat/ tufa	peat	
Dying Black Reed * A toxicity or low-nutrient phenomenon?		*	*	*	*	*	*	*					
SPECIES	COMMON NAME												
<i>Phragmites australis</i>	Common reed												
<i>Juncus subnodulosus</i>	Blunt flowered rush												
<i>Agrostis stolonifera</i>	Creeping bent grass												
<i>Filipendula ulmaria</i>	Meadowsweet												
<i>Holcus lanatus</i>	Yorkshire fog												
<i>Eupatorium cannabinum</i>	Hemp agrimony												
<i>Equisetum palustre</i>	Marsh horsetail												
<i>Cirsium palustre</i>	Marsh thistle												
<i>Carex panicea/flacca</i>	Carnation sedge												
<i>Molinia caerulea</i>	Purple moor grass												
<i>Mentha aquatica</i>	Water mint												
<i>Pedicularis palustris</i>	Marsh lousewort												
<i>Valeriana dioica</i>	Marsh valerian												
<i>Oenanthe lachenalii</i>	Parsley water dropwort												
<i>Calystegia</i> sp	Great bindweed												

* Relates to locations on the sketch map

Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **PART 2 of table**

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk, (B*)
 SP54753 05878 to SP54767 05853 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species

Undesirable species

☆ Quadrat positions for 2013 interrupted belt transect

Metres along transect A-B from point A*	14m	15m☆	16m	17m	18m	19m	20m☆	21m	22m	23m	24m	25m☆	Boardwalk 26m
Visibly wet at surface?	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	
Bare mud / peat percent	10	5	40	60	50	30	40	30	40	60	50	5	
Iron oxide or tufa or peat?	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat/ tufa	peat	
Dying Black Reed * A toxicity or low-nutrient phenomenon?		*	*	*	*	*	*	*					
SPECIES	COMMON NAME												
Poa trivialis												5	
Arrhenatherum elatius													
Epilobium hirsutum													
Scrophularia auriculata							2						
Rubus fruticosus													
Galium aparine													
Epilobium parviflorum													
Pulicaria dysenterica				1	5		1						
Hypericum tetrapterum							1						
Angelica sylvestris					0.1								
Carex lepidocarpa													
Epilobium palustre													
Juncus inflexus													
Solanum dulcamara													

* Relates to locations on the sketch map

Transect A-B data from West side (hanging fen) of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **PART 2 of table**

Vegetation belt diagonal transect from spring head at coppice ash stump (A*) downslope to path, 5m from bend in boardwalk, (B*)
 SP54753 05878 to SP54767 05853 1m x 1m contiguous quadrats, percentage cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species

Undesirable species

☆ Quadrat positions for 2013 interrupted belt transect

Metres along transect A-B from point A*	14m	15m☆	16m	17m	18m	19m	20m☆	21m	22m	23m	24m	25m☆	Boardwalk 26m
Visibly wet at surface?	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	
Bare mud / peat percent	10	5	40	60	50	30	40	30	40	60	50	5	
Iron oxide or tufa or peat?	peat	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat/ tufa	peat	
Dying Black Reed * A toxicity or low-nutrient phenomenon?		*	*	*	*	*	*	*					
SPECIES	COMMON NAME												
<i>Urtica dioica</i>	<i>Common nettle</i>												
Cardamine sp indet	Cuckoo flower/Wavy bittercress											1	
BRYOPHYTES													
Pellia endiviifolia	Endive pellia liverwort						4						
Brachythecium rutabulum	Rough-stalked feather-moss							20		20	20	10	
<i>Cratoneuron filicinum</i>	<i>Fern-leaved hook-moss</i>	0.1	1	20	30	10	20	20	40	70	50	40	
<i>Calliergonella cuspidata</i>	<i>Common spear-moss</i>	10	0.1	10	0.1	5	2	5					

* Relates to locations on the sketch map

Transect C-D data from West side of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1)

1m x 1m contiguous quadrats along transect running SE from centre of hollow in fen (C*) to boardwalk (D*)

Fen is on a slope with approx. 5m drop from point A to point B

Percentage of vegetation cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species Undesirable species		New transect (C-D*) 2015 - metres from point C* (approx. centre of transect A* to B*)											
		1m**	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	Boardwalk 12m
Visibly wet at surface?		wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	
Bare mud/peat per cent		0	5	2	2	10	10	15	20	30	40	1	
Iron oxide, tufa or peat?		tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat	peat	peat	
SPECIES	COMMON NAME												
Phragmites australis	Common reed	5	2	3	10	10	2	2	30	5	1	5	
Juncus subnodulosus	Blunt-flowered rush		15	30	40	20	2	1		20	10		
Agrostis stolonifera	Creeping bent grass					20	10	5		3	20	40	
Filipendula ulmaria	Meadowsweet								2		3		
Holcus lanatus	Yorkshire fog											2	
Eupatorium cannabinum	Hemp agrimony		10		20	10	20	10	5	10	1	1	
Equisetum palustre	Marsh horsetail				1		2	5	5	15	2	5	
Cirsium palustre	Marsh thistle			5	2	5	5	15	1	5	1		
Carex panicea and C flacca	Carnation and glaucous sedge	90	90	60	40	30	5	10	10				
Molinia caerulea	Purple moor grass	20	15	20	30	5	2	2					
Mentha aquatica	Water mint			5	3	10	5	3	5	5	2	1	
Pedicularis palustris	Marsh lousewort				1	20	35	40	2	5			
Valeriana dioica	Marsh valerian				2	5							
Oenanthe lachenalii	Parsley water-dropwort						1	1					
Carex lepidocarpa	Long-stalked yellow-sedge						15						
Iris pseudacorus	Yellow flag						2	20	15	5	5	2	
Juncus articulatus	Jointed rush								2	2		10	

* Relates to locations on the sketch map

**From centre of hollow in fen, 11m south of point 'A' on main diagonal transect (A-B)

Transect C-D data from West side of Lye Valley Fen North Fen SSSI, 02.09.2015 (relevant to Appendix 1) **APPENDIX 4**, Page (ii)
 1m x 1m contiguous quadrats along transect running SE from centre of hollow in fen (C*) to boardwalk (D*)
 Fen is on a slope with approx. 5m drop from point A to point B
 Percentage of vegetation cover on 02.09.2015 Dr Judith A Webb

KEY: Valuable calcareous fen species Undesirable species		New transect (C-D*) 2015 - metres from point C* (approx. centre of transect A* to B*)											
		1m**	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	Boardwalk 12m
Visibly wet at surface?		wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	wet	
Bare mud/peat per cent		0	5	2	2	10	10	15	20	30	40	1	
Iron oxide, tufa or peat?		tufa	tufa	tufa	tufa	tufa	tufa	tufa	tufa	peat	peat	peat	
SPECIES	COMMON NAME												
Calystegia sp	Great bindweed											1	
Fraxinus excelsior	Ash seedlings					1	2	1					
Epilobium parviflorum	Hoary willowherb												
Angelica sylvestris	Wild angelica										1	1	
Ajuga reptans	Bugle						5	2		5			
Lythrum salicaria	Purple loosestrife							4					
Hypericum tetrapterum	Square-stalked St John's-wort									2	5		
Taraxacum sp.	Dandelions											1	
BRYOPHYTES													
Brachythecium rutabulum	Rough-stalked feather-moss						10						
Cratoneuron filicinum	Fern-leaved hook-moss			10		40	50	30	40	20	30	10	
Calliergonella cuspidata	Common spear-moss				80	30	20	25	10	5	20	10	
Pellia endiviifolia	Endive pellia						5	20					
Plagiomnium sp	A thyme-moss											2	

* Relates to locations on the sketch map

**From centre of hollow in fen, 11m south of point 'A' on main diagonal transect (A-B)