

APPENDIX 5-1: Vegetation Survey Data

d = dominant

a = abundant

f = frequent

o = occasional

r = rare

l = locally (used as prefix to d, a & f)

p = planted

* = Bryophyte (moss or liverwort)

[01] track & hardstanding (Lstn chippings)

* Bicoloured Bryum	<i>Bryum dichotomum</i>	o
* Common Cord-moss	<i>Funaria hygrometrica</i>	o
Lesser Bird's-claw Beard-moss		
* moss	<i>Barbula convoluta var. convoluta</i>	o
* Redshank	<i>Ceratodon purpureus</i>	o
* Silver-moss	<i>Bryum argenteum</i>	o
Annual Meadow-grass	<i>Poa annua</i>	lf
Broad-leaved Dock	<i>Rumex obtusifolius</i>	r
Colt's-foot	<i>Tussilago farfara</i>	r
Common Bent	<i>Agrostis capillaris</i>	o

Common Chickweed	<i>Stellaria media</i>	r
Common Mouse-ear	<i>Cerastium fontanum</i>	o
Common Nettle	<i>Urtica dioica</i>	r
Common Sorrel	<i>Rumex acetosa</i>	r
Creeping Bent	<i>Agrostis stolonifera</i>	lf
Creeping Buttercup	<i>Ranunculus repens</i>	r
Dandelion	<i>Taraxacum agg.</i>	r
Equal-leaved Knotgrass	<i>Polygonum arenastrum</i>	o
Feverfew	<i>Tanacetum parthenium</i>	r
Great Willowherb	<i>Epilobium hirsutum</i>	r
Greater Plantain	<i>Plantago major</i>	r
Hairy Bitter-cress	<i>Cardamine hirsuta</i>	r
Heath Bedstraw	<i>Galium saxatile</i>	r
Herb-Robert	<i>Geranium robertianum</i>	r
Marsh Cudweed	<i>Gnaphalium uliginosum</i>	o
Northern Yellow-cress	<i>Rorippa islandica</i>	r
Pineappleweed	<i>Matricaria discoidea</i>	r
Prickly Sow-thistle	<i>Sonchus asper</i>	r
Procumbent Pearlwort	<i>Sagina procumbens</i>	lf
Red Goosefoot	<i>Chenopodium rubrum</i>	r

Redshank	<i>Persicaria maculosa</i>	r
Remote Sedge	<i>Carex remota</i>	r
Scarlet Pimpernel	<i>Anagallis arvensis</i>	r
Scentless Mayweed	<i>Tripleurospermum inodorum</i>	r
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	r
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	r
Sticky Groundsel	<i>Senecio viscosus</i>	o
Sticky Mouse-ear	<i>Cerastium glomeratum</i>	r
Thyme-leaved Speedwell	<i>Veronica serpyllifolia</i>	o
Toad Rush	<i>Juncus bufonius</i>	lf
Weld	<i>Reseda luteola</i>	r
White Clover	<i>Trifolium repens</i>	o
Yarrow	<i>Achillea millefolium</i>	r
Yorkshire-fog	<i>Holcus lanatus</i>	o

[02] disturbed edges of track

Annual Meadow-grass	<i>Poa annua</i>	la
Colt's-foot	<i>Tussilago farfara</i>	r
Common Chickweed	<i>Stellaria media</i>	o
Common Nettle	<i>Urtica dioica</i>	o
Creeping Bent	<i>Agrostis stolonifera</i>	lf

Creeping Thistle	<i>Cirsium arvense</i>	r
Curled Dock	<i>Rumex crispus</i>	o
Foxglove	<i>Digitalis purpurea</i>	r
Greater Plantain	<i>Plantago major</i>	f
Hairy Bitter-cress	<i>Cardamine hirsuta</i>	r
Lesser Burdock	<i>Arctium minus</i>	r
Lesser Spearwort	<i>Ranunculus flammula</i>	o
Marsh Thistle	<i>Cirsium palustre</i>	lf
Meadow Buttercup	<i>Ranunculus acris</i>	r
Rusty Willow	<i>Salix cinerea subsp. oleifolia</i>	r
Soft-rush	<i>Juncus effusus</i>	o
Spear Thistle	<i>Cirsium vulgare</i>	lf
Water-pepper	<i>Persicaria hydropiper</i>	r
White Clover	<i>Trifolium repens</i>	o
Yorkshire-fog	<i>Holcus lanatus</i>	lf

[03] reseeded mound around turbine footprint

* Redshank	<i>Ceratodon purpureus</i>	o
Broad-leaved Dock	<i>Rumex obtusifolius</i>	o
Common Bent	<i>Agrostis capillaris</i>	o
Common Mouse-ear	<i>Cerastium fontanum</i>	r

Common Nettle	<i>Urtica dioica</i>	o
Common Sorrel	<i>Rumex acetosa</i>	o
Creeping Bent	<i>Agrostis stolonifera</i>	lf
Creeping Buttercup	<i>Ranunculus repens</i>	f
Creeping Thistle	<i>Cirsium arvense</i>	r
Crested Dog's-tail	<i>Cynosurus cristatus</i>	o
Curled Dock	<i>Rumex crispus</i>	o
Dandelion	<i>Taraxacum agg.</i>	o
Foxglove	<i>Digitalis purpurea</i>	o
Greater Plantain	<i>Plantago major</i>	o
Green-ribbed Sedge	<i>Carex binervis</i>	o
Lesser Burdock	<i>Arctium minus</i>	r
Lesser Spearwort	<i>Ranunculus flammula</i>	o
Marsh Cudweed	<i>Gnaphalium uliginosum</i>	r
Marsh Thistle	<i>Cirsium palustre</i>	f
Marsh-bedstraw	<i>Galium palustre</i>	r
Meadow Buttercup	<i>Ranunculus acris</i>	o
Procumbent Pearlwort	<i>Sagina procumbens</i>	o
Soft-rush	<i>Juncus effusus</i>	lf
Spear Thistle	<i>Cirsium vulgare</i>	lf

Thyme-leaved Speedwell	<i>Veronica serpyllifolia</i>	o
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Yorkshire-fog	<i>Holcus lanatus</i>	a
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breeze blocks

* Common Feather-moss	<i>Kindbergia praelonga</i>	p
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* Intermediate Screw-moss	<i>Syntrichia montana</i>	p
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* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	p
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* Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	p
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* Sessile Grimmia	<i>Schistidium apocarpum</i>	p
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* Thickpoint Grimmia	<i>Schistidium crassipilum</i>	p
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* Wall Screw-moss	<i>Tortula muralis</i>	p
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[04] ditch (cleared earlier in year)

* Aloe Haircap	<i>Pogonatum aloides</i>	o
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* Bog Groove-moss	<i>Aulacomnium palustre</i>	o
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* Common Haircap	<i>Polytrichum commune</i> var. <i>commune</i>	o
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* Common Tamarisk-moss	<i>Thuidium tamariscinum</i>	r
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* Flat-topped Bog-moss	<i>Sphagnum fallax</i>	o
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* Fountain Apple-moss	<i>Philonotis fontana</i>	o
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* Fountain Smoothcap	<i>Atrichum crispum</i>	o
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* Fringed Bog-moss	<i>Sphagnum fimbriatum</i>	f
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* Heath Star Moss	<i>Campylopus introflexus</i>	r
* Lesser Cow-horn Bog-moss	<i>Sphagnum inundatum</i>	o
* Lustrous Bog-moss	<i>Sphagnum subnitens</i>	o
* Nees' Pellia	<i>Pellia neesiana</i>	o
* Overleaf Pellia	<i>Pellia epiphylla</i>	o
* Pale Glaucous Thread-moss	<i>Pohlia wahlenbergii</i>	o
* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	lf
* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	o
* Silky Forklet-moss	<i>Dicranella heteromalla</i>	lf
* Urn Haircap	<i>Pogonatum urnigerum</i>	o
Bulbous Rush	<i>Juncus bulbosus</i>	o
Carnation Sedge	<i>Carex panicea</i>	o
Common Ragwort	<i>Senecio jacobaea</i>	r
Common Sorrel	<i>Rumex acetosa</i>	o
Common Yellow-sedge	<i>Carex demissa</i>	o
Creeping Forget-me-not	<i>Myosotis secunda</i>	r
Cuckooflower	<i>Cardamine pratensis</i>	r
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	r
Hard-fern	<i>Blechnum spicant</i>	r
hybrid cinquefoil	<i>Potentilla x mixta sens. lat.</i>	r

Jointed Rush	<i>Juncus articulatus</i>	lf
Lady-fern	<i>Athyrium filix-femina</i>	o
Lesser Spearwort	<i>Ranunculus flammula</i>	f
Marsh Thistle	<i>Cirsium palustre</i>	lf
Marsh Violet	<i>Viola palustris</i>	r
Marsh-bedstraw	<i>Galium palustre</i>	lf
Meadow Buttercup	<i>Ranunculus acris</i>	r
Oval Sedge	<i>Carex leporina</i>	r
Purple Moor-grass	<i>Molinia caerulea</i>	la
Ragged-Robin	<i>Silene flos-cuculi</i>	r
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	lf
Sneezewort	<i>Achillea ptarmica</i>	o
Soft-rush	<i>Juncus effusus</i>	f
Star Sedge	<i>Carex echinata</i>	o
Tormentil	<i>Potentilla erecta</i>	o
Velvet Bent	<i>Agrostis canina</i>	f
Whorled Caraway	<i>Carum verticillatum</i>	r
Yorkshire-fog	<i>Holcus lanatus</i>	lf

fauna

Common Lizard	<i>Zootoca vivipara</i>	1
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Red Kite	<i>Milvus milvus</i>	1
Common Frog	<i>Rana temporaria</i>	3
a moth	<i>Agriphila straminella</i>	3
a psyllid	<i>Livia juncorum</i>	1
Field Vole	<i>Microtus agrestis</i>	1

[05] transitional marshy grassland / mire

* Bog Groove-moss	<i>Aulacomnium palustre</i>	lf
* Common Haircap	<i>Polytrichum commune var. commune</i>	f
* Cow-horn Bog-moss	<i>Sphagnum denticulatum</i>	o
* Lesser Cow-horn Bog-moss	<i>Sphagnum inundatum</i>	lf
* Lustrous Bog-moss	<i>Sphagnum subnitens</i>	f
Carnation Sedge	<i>Carex panicea</i>	f
Common Bent	<i>Agrostis capillaris</i>	lf
Common Sedge	<i>Carex nigra</i>	o
Common Yellow-sedge	<i>Carex demissa</i>	o
Compact Rush	<i>Juncus conglomeratus</i>	lf
Crested Dog's-tail	<i>Cynosurus cristatus</i>	r
Dandelion	<i>Taraxacum agg.</i>	r
Heath Rush	<i>Juncus squarrosus</i>	f
J. conglomeratus x effusus	<i>Juncus x kern-reichgeltii</i>	o

Lousewort	<i>Pedicularis sylvatica</i>	r
Marsh Thistle	<i>Cirsium palustre</i>	o
Marsh-bedstraw	<i>Galium palustre</i>	o
Mat-grass	<i>Nardus stricta</i>	lf
Purple Moor-grass	<i>Molinia caerulea</i>	f
Red Fescue	<i>Festuca rubra</i>	o
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	la
Sheep's-fescue	<i>Festuca ovina</i>	o
Soft-rush	<i>Juncus effusus</i>	la
Star Sedge	<i>Carex echinata</i>	o
Velvet Bent	<i>Agrostis canina</i>	f
Whorled Caraway	<i>Carum verticillatum</i>	lf
Yorkshire-fog	<i>Holcus lanatus</i>	o

[06] Molinia mire

* Bifid Crestwort	<i>Lophocolea bidentata</i>	o
* Common Feather-moss	<i>Kindbergia praelonga</i>	o
* Common Tamarisk-moss	<i>Thuidium tamariscinum</i>	o
* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	o
Bog Pimpernel	<i>Anagallis tenella</i>	o
Carnation Sedge	<i>Carex panicea</i>	lf

Common Sorrel	<i>Rumex acetosa</i>	o
Common Yellow-sedge	<i>Carex demissa</i>	o
Flea Sedge	<i>Carex pulicaris</i>	o
Heath Rush	<i>Juncus squarrosus</i>	lf
Lesser Spearwort	<i>Ranunculus flammula</i>	o
Male-fern	<i>Dryopteris filix-mas</i>	r
Marsh Thistle	<i>Cirsium palustre</i>	f
Marsh Violet	<i>Viola palustris</i>	o
Marsh Willowherb	<i>Epilobium palustre</i>	r
Marsh-bedstraw	<i>Galium palustre</i>	lf
Mat-grass	<i>Nardus stricta</i>	lf
Meadow Buttercup	<i>Ranunculus acris</i>	r
Purple Moor-grass	<i>Molinia caerulea</i>	a
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	lf
Tormentil	<i>Potentilla erecta</i>	o
Velvet Bent	<i>Agrostis canina</i>	f
Whorled Caraway	<i>Carum verticillatum</i>	o
Yorkshire-fog	<i>Holcus lanatus</i>	o

[07] ditch

* Blunt-leaved Bog-moss	<i>Sphagnum palustre</i>	la
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* Crenulated Flapwort	<i>Solenostoma gracillimum</i>	o
* Flat-topped Bog-moss	<i>Sphagnum fallax</i>	lf
* Fringed Bog-moss	<i>Sphagnum fimbriatum</i>	lf
* Ladder Flapwort	<i>Nardia scalaris</i>	o
* White Earwort	<i>Diplophyllum albicans</i>	o
Bogbean	<i>Menyanthes trifoliata</i>	ld
Cross-leaved Heath	<i>Erica tetralix</i>	o
Heather	<i>Calluna vulgaris</i>	lf
Lemon-scented Fern	<i>Oreopteris limbosperma</i>	f
Mat-grass	<i>Nardus stricta</i>	lf

[08] M6 mire

* Common Haircap	<i>Polytrichum commune var. commune</i>	la
* Papillose Bog-moss	<i>Sphagnum papillosum</i>	la
Marsh-bedstraw	<i>Galium palustre</i>	lf
Purple Moor-grass	<i>Molinia caerulea</i>	la
Soft-rush	<i>Juncus effusus</i>	f
Star Sedge	<i>Carex echinata</i>	o

[09] M6 mire transition

* Blunt-leaved Bog-moss	<i>Sphagnum palustre var. palustre</i>	f
* Bog Groove-moss	<i>Aulacomnium palustre</i>	lf

* Papillose Bog-moss	<i>Sphagnum papillosum</i>	o
* Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	o
Common Sedge	<i>Carex nigra</i>	o
Common Valerian	<i>Valeriana officinalis</i>	o
Common Yellow-sedge	<i>Carex demissa</i>	o
Foxglove	<i>Digitalis purpurea</i>	lf
Lesser Spearwort	<i>Ranunculus flammula</i>	lf
Marsh-bedstraw	<i>Galium palustre</i>	f
Purple Moor-grass	<i>Molinia caerulea</i>	lf
Soft-rush	<i>Juncus effusus</i>	ld
Star Sedge	<i>Carex echinata</i>	o
Whorled Caraway	<i>Carum verticillatum</i>	o

[10] lower stream

Bracken	<i>Pteridium aquilinum</i>	ld
Male-fern	<i>Dryopteris filix-mas</i>	f
Purple Moor-grass	<i>Molinia caerulea</i>	ld
Rusty Willow	<i>Salix cinerea subsp. oleifolia</i>	r
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	f
Western Gorse	<i>Ulex gallii</i>	lf

[11] flushed AG

* Juniper Haircap	<i>Polytrichum juniperinum</i>	o
* Lustrous Bog-moss	<i>Sphagnum subnitens</i>	o
* Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	f
Common Bent	<i>Agrostis capillaris</i>	f
Field Wood-rush	<i>Luzula campestris</i>	o
Foxglove	<i>Digitalis purpurea</i>	o
Heath Bedstraw	<i>Galium saxatile</i>	lf
Heather	<i>Calluna vulgaris</i>	r
Mat-grass	<i>Nardus stricta</i>	f
Sheep's-fescue	<i>Festuca ovina</i>	lf
Soft-rush	<i>Juncus effusus</i>	la
Tormentil	<i>Potentilla erecta</i>	o
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	lf
Western Gorse	<i>Ulex gallii</i>	o

[12] rush-pasture

* Bog Groove-moss	<i>Aulacomnium palustre</i>	lf
* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	la
* Tree-moss	<i>Climacium dendroides</i>	o
f Meadow Waxcap	<i>Hygrocybe pratensis var. pratensis</i>	p
Carnation Sedge	<i>Carex panicea</i>	lf

Creeping Buttercup	<i>Ranunculus repens</i>	o
Crested Dog's-tail	<i>Cynosurus cristatus</i>	o
Dandelion	<i>Taraxacum agg.</i>	lf
Lesser Spearwort	<i>Ranunculus flammula</i>	o
Marsh Thistle	<i>Cirsium palustre</i>	o
Marsh-bedstraw	<i>Galium palustre</i>	o
Mat-grass	<i>Nardus stricta</i>	lf
Soft-rush	<i>Juncus effusus</i>	d
Star Sedge	<i>Carex echinata</i>	r
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	lf
Thyme-leaved Speedwell	<i>Veronica serpyllifolia</i>	o
Velvet Bent	<i>Agrostis canina</i>	f
Whorled Caraway	<i>Carum verticillatum</i>	r
Yorkshire-fog	<i>Holcus lanatus</i>	la

[13] scrub

Rusty Willow	<i>Salix cinerea subsp. oleifolia</i>	r
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[14] rush-pasture

* Pointed Spear-moss	<i>Calliergonella cuspidata</i>	f
* Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	la
f Field Mushroom	<i>Agaricus campestris</i>	p

Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	r
Common Bent	<i>Agrostis capillaris</i>	f
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	lf
Common Sedge	<i>Carex nigra</i>	o
Creeping Bent	<i>Agrostis stolonifera</i>	lf
Creeping Buttercup	<i>Ranunculus repens</i>	lf
Marsh Foxtail	<i>Alopecurus geniculatus</i>	r
Marsh Thistle	<i>Cirsium palustre</i>	lf
Meadow Buttercup	<i>Ranunculus acris</i>	o
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	lf
Tormentil	<i>Potentilla erecta</i>	o
Velvet Bent	<i>Agrostis canina</i>	f
White Clover	<i>Trifolium repens</i>	o
Whorled Caraway	<i>Carum verticillatum</i>	r
Yorkshire-fog	<i>Holcus lanatus</i>	f
* Common Pincushion	<i>Dicranoweisia cirrata</i>	o
<u>[15] hedgebank</u>		
* Bank Haircap	<i>Polytrichastrum formosum</i>	lf
	<i>Hypnum</i> <i>cupressiforme</i>	var.
* Cypress-leaved Plait-moss	<i>cupressiforme</i>	o

* Juniper Haircap	<i>Polytrichum juniperinum</i>	o
* Redshank	<i>Ceratodon purpureus</i>	o
* Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	lf
li a lichen	<i>Peltigera lactucifolia</i>	o
Common Bent	<i>Agrostis capillaris</i>	a
Common Sorrel	<i>Rumex acetosa</i>	o
Hawthorn	<i>Crataegus monogyna</i>	r
Heath Bedstraw	<i>Galium saxatile</i>	lf
Mat-grass	<i>Nardus stricta</i>	o
Sheep's Sorrel	<i>Rumex acetosella</i>	lf
Sheep's-fescue	<i>Festuca ovina</i>	lf
Yorkshire-fog	<i>Holcus lanatus</i>	lf

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APPENDIX 5-2: Photographs

Substation and access gates



Turbine base and gravel area



View of the site before mowing, looking from turbine to south west



Eastern field looking south east – sensitive habitat



Middle of southern field looking west before mowing



Earth bank on western boundary



Pond in south western corner



Pond on boundary with adjacent land



Ditch from top of the Site running between fields



Ditch in the middle of the fields (blue line)



View of solar farm site after mowing



View from east showing mowed area



View looking east



View looking north



