

Conservation Management at Dibbinsdale Local Nature Reserve

Bodens Hey - Grassland management plan

Bodens Hey is an area of grassland approx 10 acres in size.(See maps) It lies within the SSSI designation of Dibbinsdale Local Nature Reserve. The grassland borders the River Dibbin which flows to the north. To the south of the grassland is an area of arable farmland known as Vineyard Farm and a public footpath going through the grassland crosses this field. To either side of the grassland(roughly east and west) there is a wooded hedgerow.

The grassland slopes evenly from the southern perimeter bordering the farm, to the lowland near the river to the north. Close to the brow of the slope, there is a small copse of young trees. The soil is mostly clay. To the west of the grassland the drainage is particularly poor and in heavy rainfall there is considerable surface run off down the slope.

The grassland has been known to have been grazed in living memory although since its incorporation into the nature reserve in the early 1980's this has not been the case. In the late 1980's there were attempts at grassland management involving cutting and bailing with machinery. Mainly due to inadequate funding , there has not been any mowing in the 1990's

Present condition

The grassland shows the early signs of scrub succession- hawthorn, oak, ash and willow invasion. Brambles, rosebay willow herb and tall grasses are increasingly evident ,colonising an growing area. A survey of the grassland was done in 1998 by Cheshire Wildlife Trust. It is considered that the grassland is primarily managed for its small mammals and insect value. The grassland is poor in plant species. Efforts have recently been made to cut back the area of brambles that is encroaching.

Suggested management (Restoration of grassland)- See map.

For the first three years there be a twice yearly cut and bailing of a third of the grassland.(Early summer and late summer) After the third's twice yearly cut the grassland is then cut and bailed only yearly in late summer. In the first three years there be 'remedial' treatment of each third(i.e. prior to being first cut)of selective removal of young trees and invasive shrub. This would be in autumn and winter preceding the cut and bailing in the following year. This work would be done by hand.

Sustainability (Funding of the future grassland work.)

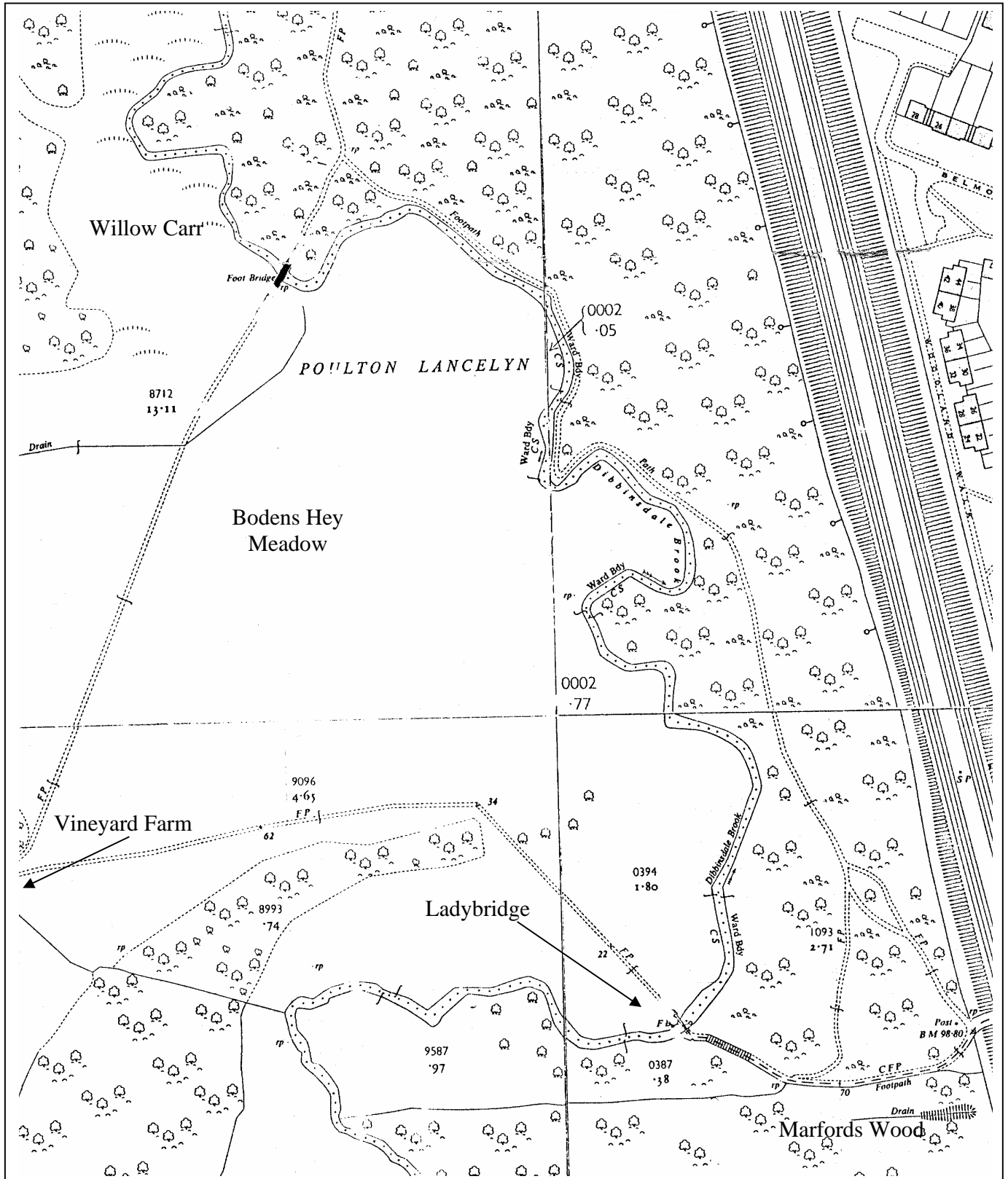
The problem of long term grassland management on this site by the council is primarily one of resources. There is no machinery available within the council's district area management teams to cut and bail grass. The grass can be cut only. Contractors have been employed to do this work in the past but this is a crippling drain on funds that is difficult to resource. The long term solution is that funds be made available to buy cut and bailing equipment for use by the council's own staff. In the short term ,that contractors be employed to cut and bail the grass for the first year.

Peter Miller - Ranger - Sept 99

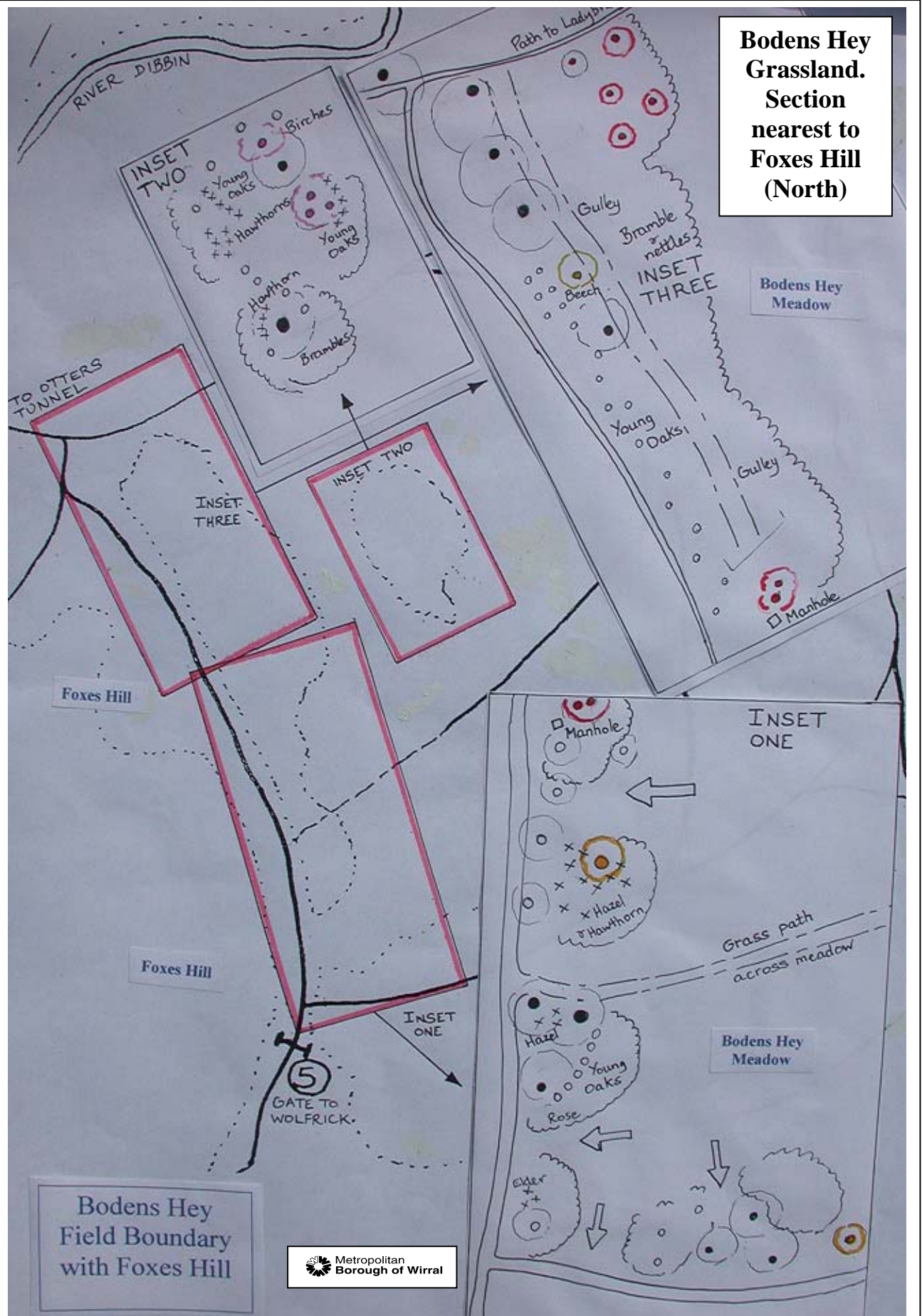


Metropolitan
Borough of Wirral

Conservation Management at Dibbinsdale Local Nature Reserve



**Bodens Hey
Grassland.
Section
nearest to
Foxes Hill
(North)**

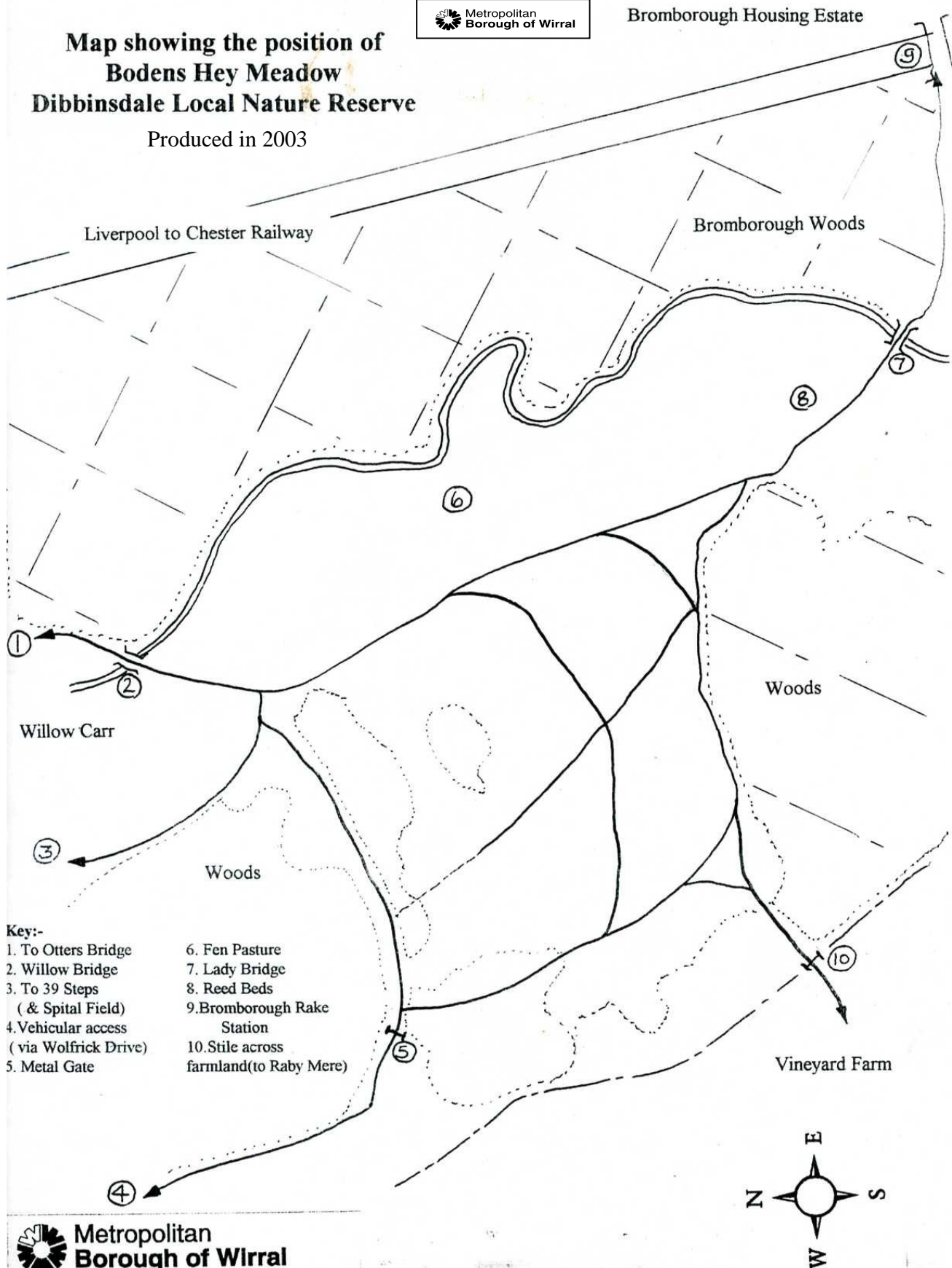


Map showing the position of Bodens Hey Meadow Dibbinsdale Local Nature Reserve

Produced in 2003



Bromborough Housing Estate

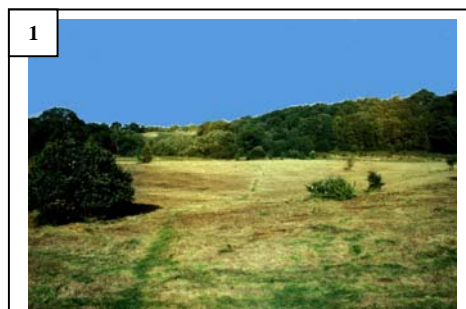


**Metropolitan
Borough of Wirral**

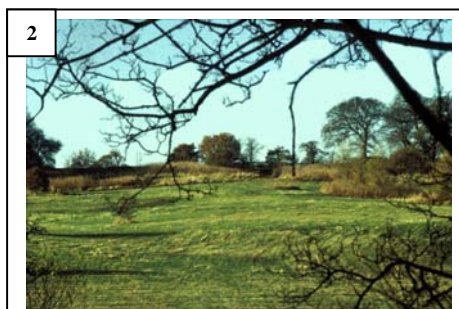
Department of Leisure Services & Tourism, Westminster House, Hamilton Street, Birkenhead L41 5FN Tel. 0151 647 2366

Bodens Hey Meadow- Grassland Restoration

Archive Slides 1980's- last time grasscut



Bodens Hey Meadow in 1985 viewed from the top of the meadow



Babbs Meadow in 1986 viewed from the bottom of the meadow



Grass cutting in 1988 by tractor and flail



Rosebay willow herb in the meadow close to Raby Mere Footpath- 1990



Bottom of the meadow- wet grassland near the river- 1980's



Bodens Hey being cut 1980's. View from the top of the meadow

Evaluating the condition of the meadow 2000



Bodens Hey in late 1990's. View of the developing scrub from bottom of meadow



Grassland view from river 2000



Tree line perimeter 2000

Fixed point photographs of the grassland



View from top bench in 2003. Scrub removal close to foreground



View from bottom bench in 2003



View from top bench in 2003



Bodens Hey Meadow – Grassland Restoration

Lever Research - Bodens Hey voluntary work 2003 - 2005



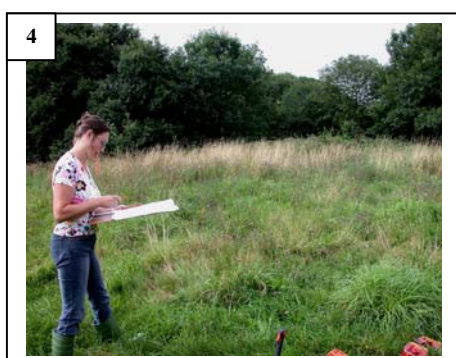
Lever volunteers remove tree brash -



Bramble bashing by hand on the western edge of the meadow



Storage and collection of brash at the top of the meadow



Surveying vegetation prior to grassland management



Chainsaw use on heavy undergrowth and thicket to the west of the meadow



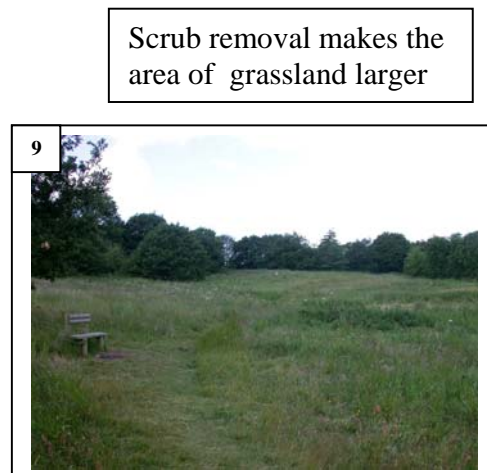
Removal of seeded down trees within the grassland



Thinning down of tree growth to the south of the meadow



Removal of developing thicket close to raby Mere footpath



Removal of thicket close to mid point grassland and bench

Scrub removal makes the area of grassland larger



Removal of brambles at the top of the meadow



Removal of rosebay willow herb at the top of the meadow



View of the meadow from the top bench. Spot strimming of rosebay willow herb

Bodens Hey Meadow - Grassland Restoration- Brief Update

2000 Vegetation survey undertaken by Wirral Wildlife

2003 Unilever Research Volunteers begin scrub removal
Drainage work at top of meadow
Planning of grassland management begun
Summer 2003 – Mapping and monitoring of grassland species

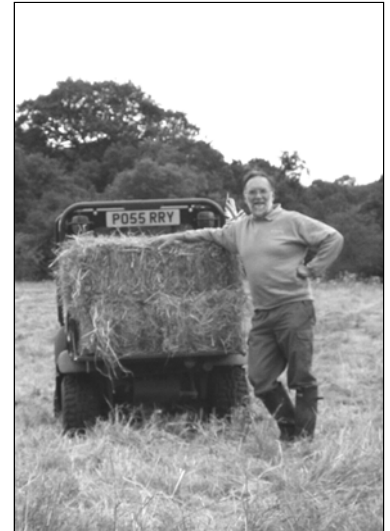
2004 Vegetation Surveys and small mammal trapping
Removal of willow scrub from stile area at top of meadow
Trees removed from Marfords Wood side of meadow
Scrub removed from the base of solitary trees on the meadow

2005 Dry run. Cutting grass by flail but not baled - removal with volunteers, using bags
Strimming out top of meadow area (bordering Vinyard Farm)
Erection of noticeboards at the top and bottom of the meadow
Removal of trees from 'grassy knoll'
Removal of ragwort prior to cutting
Countryside Stewardship agreement put in place

2006
Repaeted strimming of worst rosebay willow herb areas
Chemical spraying of Roundup to counter Rosebay willow herb
Continued removal of tree stumps from meadow
Earth brought in to fill the holes made
Removal of Ragwort prior to cutting
Digging up of ferns in the meadow
Andy Young's Contracting completes first meadow cut and bale(second week of July)

2007 Chemical spraying of Roundup to counter Rosebay willow herb
Removal of ragwort prior to cutting
Second meadow cut by Andy Young (second week of July)
Continued work removing brambles from the Foxes Hill side
Continued stump removal and treatment
Path constructed at bottom of meadow

2008 Chemical spraying of Roundup to counter
Rosebay willow herb
(Limited spot spraying and an area nearest stile)
Removal of trees (maples) at the bottom of the meadow
Use of petrol mower to cut all footpaths across the meadow
(three times on average)
Few remaining ragworts removed
Third meadow cut and bale (second week of July)
Wetland grassland area strimmed back in late autumn(material removed)



Conservation Management at Dibbinsdale Local Nature Reserve

Vegetation Survey

BODEN'S HEY, DIBBINSDALE

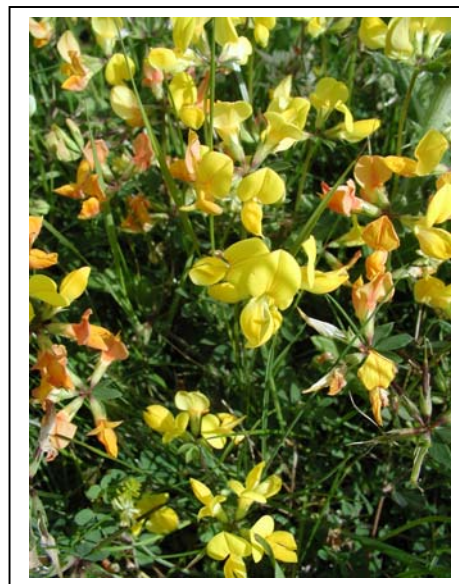
Botanical survey 19/5/98, 16/7/98

H.J.Ash, C. Clarke, M. Gilmour, J. O'Boyle.

D=dominant, A=abundant, F=frequent, O=occasional, R=rare, L=locally. f5 flowering May, f7 flowering July

Main grassland:

<i>Achillea millefolium</i>	yarrow	O
<i>Agrostis capillaris</i>	common bent	F,LA f7
<i>Alopecurus pratensis</i>	meadow foxtail	R f5
<i>Anemone nemorosa</i>	wood anemone	R
<i>Angelica sylvestris</i>	wild angelica	R
<i>Anthoxanthum odoratum</i>	sweet vernal-grass	O f5
<i>Anthriscus sylvestris</i>	cow parsley	R f5
<i>Arrhenatherum elatius</i>	false oatgrass	A f7
<i>Artemisia vulgaris</i>	mugwort	R
<i>Betula pendula</i>	silver birch	R
<i>Carex hirta</i>	hairy sedge	R f5
<i>Centaurea nigra</i>	hardheads	F f7
<i>Cerastium fontanum</i>	mouse-ear chickweed	R
<i>Chamaenerion angustifolium</i>	rosebay willow-herb	F,LA f7
<i>Cirsium arvense</i>	creeping thistle	R
<i>Cirsium palustre</i>	marsh thistle	R f7
<i>Conopodium majus</i>	pignut	R f5
<i>Crataegus monogyna</i>	hawthorn	O
<i>Dactylis glomerata</i>	cocksfoot	O,LA f5
<i>Dryopteris affinis</i>	scaly male fern	R,LF
<i>Epilobium ciliatum</i>	American willowherb	R f7
<i>Equisetum arvense</i>	field horsetail	R
<i>Festuca rubra</i>	red fescue	A f5
<i>Fraxinus excelsior</i>	ash	R, LF
<i>Galeopsis tetrahit</i>	hemp-nettle	R f7
<i>Galium aparine</i>	cleavers	R
<i>Hedera helix</i>	ivy	R
<i>Heracleum sphondylium</i>	hogweed	O f7
<i>Holcus mollis</i>	soft-grass	O f7
<i>Holcus lanatus</i>	Yorkshire fog	F,LA f7
<i>Hyacinthoides non-scripta</i>	bluebell	R
<i>Hypochaeris radicata</i>	cat's-ear	O f7
<i>Juncus effusus</i>	soft rush	R
<i>Lathyrus pratensis</i>	meadow vetchling	O f7
<i>Lotus uliginosus</i>	marsh trefoil	O f7
<i>Luzula campestris</i>	field woodrush	F f5
<i>Medicago lupulina</i>	black medick	R f7
<i>Odontites verna</i>	red bartsia	R along paths
<i>Phalaris arundinacea</i>	reed canary-grass	R f7
<i>Phleum pratense</i>	timothy	R f7
<i>Plantago lanceolata</i>	ribwort	F f5
<i>Plantago major</i>	plantain	O, LA by path



Poa annua	annual meadow-grass	R,LA path f5
Poa pratensis	smooth meadow-grass	F f5
Potentilla anserina	silverweed	R
Potentilla erecta	tormentil	R f5
Potentilla reptans	creeping cinquefoil	R f7
Prunus sp.	cherry	R juvenile
Quercus cerris	Turkey oak	R seedling
Quercus robur	pedunculate oak	F juveniles
Ranunculus acris	meadow buttercup	O f5
Ranunculus ficaria	celandine	R
Ranunculus repens	creeping buttercup	O f5
Rubus fruticosus	bramble	O
Rumex acetosa	sorrel	O,LF f5
Rumex obtusifolius	oblong dock	R
Senecio jacobaea	ragwort	R f7
Stellaria graminea	lesser stitchwort	R f7
Stellaria holostea	greater stitchwort	R f5
Trifolium pratense	red clover	O f7
Trifolium repens	white clover	O f7
Urtica dioica	stinging nettle	R
Veronica chamaedrys	germander speedwell	O,LF f5
Vicia sepium	bush vetch	O
Vicia cracca	tufted vetch	R

ash saplings 3-4m tall, oaks seedling to 2m, scattered hawthorn 3m.

Marsh (a), south of scrub

Achillea millefolium	yarrow	R
Aegopodium podagraria	goutweed	R
Alopecurus pratensis	meadow foxtail	R f5
Angelica sylvestris	wild angelica	R
Anthoxanthum odoratum	sweet vernal-grass	O f5
Anthriscus sylvestris	cow parsley	O f5
Cardamine pratensis	cuckoo-flower	O,LA f5
Carex nigra	common sedge	R f5
Carex hirta	hairy sedge	F,LA f7
Centaurea nigra	hardheads	F f7
Cerastium fontanum	mouse-ear chickweed	R f5
Chamaenerion angustifolium	rosebay willow-herb	O
Cirsium palustre	marsh thistle	F f7
Crataegus monogyna	hawthorn	O
Dactylis glomerata	cocksfoot	R
Deschampsia caespitosa	tufted hairgrass	R F7
Epilobium hirsutum	hairy willow-herb	F,LA f7
Equisetum arvense	field horsetail	O
Galeopsis sp.	hemp-nettle	R
Galium palustre	marsh bedstraw	O f7
Heracleum sphondylium	hogweed	O f7
Holcus mollis	soft-grass	O f7
Holcus lanatus	Yorkshire fog	O f7



Isolepis setacea	bristle club-rush	R path
Juncus inflexus	hard rush	R f7
Juncus effusus	soft rush	F,LA f7
Juncus articulatus	jointed rush	R path
Juncus conglomeratus	round-fruited rush	F,LA f7
Lathyrus pratensis	meadow vetchling	F f7
Lotus uliginosus	marsh trefoil	F,LA f7
Lychnis flos-cuculi	ragged robin	F f5
Odontites verna	red bartsia	R path
Phalaris arundinacea	reed canary-grass	O,LA f7
Plantago lanceolata	ribwort	O f5
Potentilla reptans	creeping cinquefoil	R
Ranunculus repens	creeping buttercup	F f7
Ranunculus ficaria	celandine	O
Ranunculus acris	meadow buttercup	R f5
Rumex obtusifolius	oblong dock	O
Rumex conglomeratus	clustered dock	O f7
Rumex crispus	curled dock	O f7
Rumex acetosa	sorrel	F
Stellaria graminea	lesser stitchwort	O f7
Veronica chamaedrys	germander speedwell	R f5
Viburnum opulus	guelder rose	R
Vicia sativa	common vetch	R
Vicia sepium	bush vetch	O
Vicia cracca	tufted vetch	R



informal path up south side of marsh has bristle club-rush, jointed rush and red bartsia on it. Patch of fine grass near bottom on S side is used as basking area by butterflies.

Marsh b, north of scrub

Acer pseudoplatanus	sycamore	R
Acer platanoides	Norway maple	R
Acer campestre	field maple	R top of marsh
Achillea millefolium	yarrow	R
Alopecurus pratensis	meadow foxtail	O,LA f5
Anthoxanthum odoratum	sweet vernal-grass	F f5
Anthriscus sylvestris	cow parsley	O f5
Arrhenatherum elatius	false oat-grass	F f7
Aster novi-belgii	Michaelmas daisy	R
Cardamine flexuosa	bitter-cress	R f5
Carex hirta	hairy sedge	F f5
Centaurea nigra	hardheads	O f7
Chamaenerion angustifolium	rosebay willow-herb	F f7
Cirsium arvense	creeping thistle	F f7
Cirsium palustre	marsh thistle	F f7
Dactylis glomerata	cocksfoot	O
Dactylorhiza fuchsii	spotted orchid	R f7
Dactylorhiza fuchsii x praetermissa	hybrid orchid	R f7
Dryopteris affinis	scaly male fern	O
Epilobium hirsutum	hairy willow-herb	F,LA f7



Epilobium ciliatum
 Equisetum arvense
 Filipendula ulmaria
 Fraxinus excelsior
 Galium aparine
 Galium palustre
 Geranium dissectum
 Heracleum sphondylium
 Holcus mollis
 Hypericum perforatum
 Juncus conglomeratus
 Juncus inflexus
 Lathyrus pratensis
 Lotus uliginosus
 Lychnis flos-cuculi
 Phalaris arundinacea
 Plantago lanceolata
 Pulicaria dysenterica
 Quercus robur
 Ranunculus acris
 Ranunculus repens
 Rubus fruticosus
 Rumex crispus
 Rumex conglomeratus
 Rumex acetosa
 Rumex obtusifolius
 Senecio jacobaea
 Stachys sylvestris
 Stellaria alsine
 Stellaria graminea
 Taraxacum officinale
 Trifolium pratense
 Urtica dioica
 Veronica chamaedrys
 Vicia cracca
 Vicia sativa

American willowherb R f7
 field horsetail O
 meadowsweet O f7
 ash R
 cleavers O,LA f7
 marsh bedstraw O,LA f7
 cut-lvd cranesbill R
 hogweed F f7
 soft-grass O,LA f7
 St. John's wort R f7
 round-fruited rush O,LA f7
 hard rush O,LA f7
 meadow vetchling O f7
 marsh trefoil F f7
 ragged robin F,LA f5 f7
 reed canary-grass O,LA f7
 ribwort R f5
 fleabane F,LA
 pedunculate oak R juvenile
 meadow buttercup R f5 f7
 creeping buttercup O f5
 bramble A f7
 curled dock O f7
 clustered dock R f7
 sorrel O
 broad-lvd dock O
 ragwort R
 hedge woundwort R f7
 bog stitchwort O f7
 lesser stitchwort O f7
 dandelion R
 red clover R f7
 stinging nettle A,LD
 germander speedwell O,LA f5
 tufted vetch R
 common vetch R



One flowering spike of spotted orchid, 2 of the hybrid.

Tongue of grass north of trees

Agrostis capillaris common bent F
 Angelica sylvestris wild angelica R
 Anthoxanthum odoratum sweet vernal-grass O
 Carex hirta hairy sedge R
 Centaurea nigra hardheads O
 Cirsium arvense creeping thistle R
 Conopodium majus pignut O
 Dactylis glomerata cocksfoot F
 Festuca rubra red fescue F
 Galium aparine cleavers O

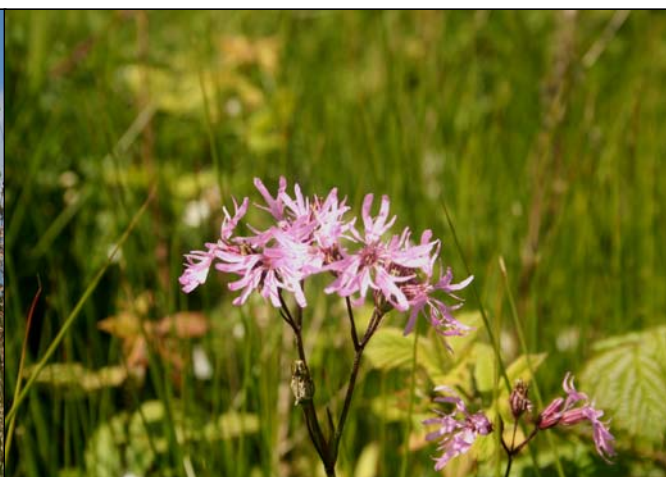


Heracleum sphondylium	hogweed	R
Holcus lanatus	Yorkshire fog	O
Holcus mollis	soft-grass	F,LA
Hypochaeris radicata	cat's-ear	F
Leontodon autumnalis	ryegrass	O
Lotus uliginosus	marsh trefoil	R
Phalaris arundinacea	reed canary-grass	R
Plantago lanceolata	ribwort	F
Plantago major	plantain	R
Poa pratensis	smooth meadow-grass	F
Potentilla reptans	creeping cinquefoil	R
Pteridium aquilinum	bracken	R,LD
Quercus robur	pedunculate oak	O juvenile
Ranunculus repens	creeping buttercup	O
Ranunculus acris	meadow buttercup	R
Rubus fruticosus	bramble	O
Rumex obtusifolius	broad-ldv dock	R
Rumex crispus	curled dock	R
Rumex acetosa	sorrel	O
Stachys sylvestris	hedge woundwort	O
Stellaria graminea	lesser stitchwort	R
Trifolium pratense	red clover	O
Trifolium repens	white clover	O
Urtica dioica	stinging nettle	R
Veronica chamaedrys	germander speedwell	R
moles, but no rabbits		



Notes from conversations with Jill Smethurst and Selena Hill (HJA);

Rosebay willow-herb - possibly dates back to fires at the height of the vandalism here in early 1980's. Will yield to repeated cutting (trim biggest patches each year before flowering or more frequently), try cutting but may have to use herbicide if doesn't work. No need to eradicate all as it is a useful nectar source and foodplant. Some meadows on acid soils in Cheshire are very species-poor - i.e. the relatively short list for the main grassland is not necessarily a result of past lack of management. However getting regular mowing re-instated may encourage more species to appear - EN very keen to try regular mowing for a good period before any wild flower introductions considered. Jill very keen on getting it grazed, as this was probably its management for a long time - possibly with rare breeds stock; but obviously that has major implications for dogs, fencing, people, water supply, etc., although Countryside Stewardship money could help on financial side



On going management

Annual

- Once yearly cut and bale(mid July to end of July preferable)

- Mowing paths through the grassland

(three or four times depending on grass growth)

- Selective spraying(rosebay willow herb)use of Roundup on the edges of the meadow
- Pulling ragwort before meadow cut(early July)

Project work

- Improve drainage at the top of meadow

Date completed

- Strim back brambles on the Foxes Hillside of meadow

Date completed

- Install lecturn noticeboard near Willow Bridge

Date completed

- Reduce number of trees within the meadow year on year (grub out roots/ chemically treat stumps)

Date completed

- Hand strim and mow wetland section of the meadow(every three years)

Date completed

- Update content of lecturn noticeboards (every two or three years approx)

Date completed

- Renew footpath signs (as necessary)

Date completed

- Survey and map changes in vegetation(every two or three years)

Date completed

- Monitor vole populations(every two or three years)

Date completed

