Smawell lane Meadows – Site visit 18/09/2020

Tim Kohler visited this site on behalf of the Wakefield District Biodiversity Group at the invitation of Notton Parish Council.

Site Description

The site consists of a grassland area surrounded by hedgerows, and a small area of woodland/wetland along a small stream. The grassland is divided into three sections by post and wire fences. The site is quite steeply sloping, facing almost due West, with the top of the slope to the East. Total area about 3.1 ha.

The site appeared to have had no management this year, with the grass uncut or grazed and quite long, but there is evidence of previous management which looks to have been horse or possibly cattle grazing.

A plant species list is attached, but is should be noted that this visit was taken very late in the season, and a further visit in the spring will probably identify more species, especially grasses.

The hedgerows around the site are very prominent, and contain a good range of woody shrubs and trees. There was little seen in the ground flora, but this may be due to the late season of the survey. The eastern hedge is predominantly hawthorne, with a group of oak trees at the southern end, and occasional hedgerow trees. It is quite gappy with several open stretches with remnant elder. It shows little sign of recent management, but is not yet grown out, so has been kept in check within the last few years. Most of the hawthorne is old, with stems over 4” in diameter.

The Western and northern hedge lines border the road are more varied in composition and these hedges are dominated by hedgerow trees of over 5m high. The presence of willows indicates that the lower side of the site can get quite wet.

The grassland is relatively species poor, dominated by just a few grass species and with relatively few broadleaved wildflowers. However there are some areas of sparse growth dominated by fine leaved bent-grass which are typical of a semi-natural acid grassland habitat along the eastern side. There are some interesting wildflowers present (albeit not rare ones), such as sheep’s sorrel, birds-foot trefoil, yarrow and knapweed, but these are not common within the site. Most of the grass is quite lush, but the presence of the more acidic looking areas suggests that the site has not been heavily fertilised, or ploughed up in the past. Notably the dominant species (bent-grass and soft grass) are not particularly favoured agricultural grasses. There are patches of “weed” species (docks, nettles, thistles) throughout, but these are only locally dominant.

The stream area is dominated by trees species (oak and hazel) in the canopy, with some very nice big hazels, and the invasive alien Himalayan Balsam in the ground flora. A few ferns, some small patches of dog’s mercury and the remnants of bluebells indicate that this has been woodland for some time. It was not possible to identify the bluebells definitively, but the remaining flower stems suggest it may be a

hybrid of native and Spanish varieties. No specifically wetland species were seen, but again this may be due to the late season of the survey.

Context

The site is isolated from other areas of semi-natural habitat by large arable fields, except along the line of Smawell lane, which has well developed hedgerows linking it to the Chevitt Branch Line, and to another areas of trees and grass on the edge of Notton village. About 200m to the west is The Ings, and area of wet woodland. There are a number of other wildlife sites at a greater distance (700-1500m) such as the Barnsley Canal and Haw Park Wood. This site would form a valuable adjunct to the existing hedgerow network, and with enhancement a stepping stone linking through to other wildlife sites.

From a wildlife perspective, the value of this site is split between the well developed and varied hedges and the remnant areas of acid grassland. The hedges are part of the wider network of hedgerows in the area, but with those bordering Smawell lane are particularly varied examples. The acid grassland is a rare resource in the area, with only small patches existing in other sites locally. The presence of the stream adds to the wildlife value, but this survey has not shown up any particular importance.

Management Suggestions

The eastern hedgerow is becoming derelict, and may be suffering from excessive management (cutting) in parts from the arable field to the east. The hawthorne is mostly quite old, and there are several lengths of decrepit elder. If this is left unmanaged it will decline and become a few trees on a rough grass bank (although this will take some time). It is suggested that as a minimum the gaps should be planted with new hedgerow shrubs. A more complete solution would be to coppice the overgrown hawthorne, and some of the smaller hedgerow trees, as well as gapping up, and this would rejuvenate the hedge, which could then be laid at some later point. Ideally this rejuvenation should be done over several years (3-4). Note that the hedge will require regular management and trimming.

Any management will need to take into account the management of the adjacent arable field, as excessive growth will cause shading to the crop. Responsibility for the management of this boundary will also need to be clearly established. It is strongly advised that a discussion takes place with the adjacent owner and an approach is agreed prior to any work taking place.

The hedge adjacent to Smawell Lane has grown past the point that it can really be considered as a hedge, and is more a strip of woodland. Recovering this to a hedge is probably not worth the effort. Given the current emphasis on tree planting, and the relatively poor (wildlife) quality of the grassland at the bottom of the slope we would suggest that a strip of the field alongside the lane and up the side of the stream (perhaps up to half the area of the field) could be planted as woodland. This would benefit from the presence of some woodland flora in the stream area, and the existing trees from the grown out hedge. The natural woodland in this area would be dominated by oak, but with birch and other trees mixed in (see the species list for

ideas as to what to consider). An understory of hazel should also be included. We would point out that to maintain its interest, and to help the area develop into proper woodland, a long term management plan would be needed, which should include good forestry management including thinning out the planting significantly (by 50-75%) at 10-15 years. This may seem drastic, but many recreational plantings are ruined by not doing this, leaving the resulting “wood” densely congested, with so much shade that there is almost no ground flora, and individual trees poorly developed. Trees tubes should also be removed at this stage, not simply left to litter the landscape.

The best of the grassland is in the top (eastern) part of the site. This is acid grassland, which is naturally fairly species poor, but would benefit from some enhancement. The grass is currently quite overgrown, and regardless of future management would benefit from being cut, and the cuttings removed. This will also help to control the more “weedy” species.

An appropriate wildflower seed mixture could be applied, but the site would need cutting and scarifying first, to create space for the seeds. An alternative would be to use small plug plants, these give a quicker effect, but may need some aftercare (watering!) and are more expensive, although wildflower seed is not cheap either.

The grassland will need managing, ideally this would be grazing, sheep or cattle would be best, horses would need very careful management to avoid overgrazing, and generally the grazing pressure would need to be carefully managed. There is probably not a big enough area to provide permanent (year round) grazing for more than a very few animals, so they would need other places to graze as well as this. Grazing would also require the site to be re-fenced, as the existing fences are very broken down.

Cutting would be an alternative, with the site cut at least once each year in late July/August, and possibly again later in the season, or in the spring if there is a lot of growth. The cuttings must be removed, to prevent them smothering the plants, or forming a dense thatch which can inhibit smaller and annual species. Removal as hay or haylege may offer the chance of some income from this activity.

RTK
23/09/20

Species List

F= Found in grassland area, H= Found in hedgerow, W= Found in woodland/wetland area

date - 18/09/2020
Grid. Ref. SE355135

Latin Name	English Name	Type	Smawell Lane Fields
Impatiens galndulifera	Himalayan balsam	alien	F/W
Dryopteris dilatata	Buckler, broad	fern	W
Dryopteris felix-mas	Male fern	fern	W
Dactylis glomerata	Cock's foot	grass	F
Arrhenatherum avenaceum	False oat-grass	grass	F
Alopecurus pratensis	Fox-tail, common	grass	F
Lolium perene	Rye-grass	grass	F/H
Phleum pratense	Timothy	grass	F
Holcus lanatus	Yorkshire fog	grass	F
Agrostis canina	Bent grass	grass	F
Fraxinus excelsior	Ash	tree	H
Prunus spinosa	Blackthorne	tree	H
Sambucus nigra	Elder	tree	H/W
Acer campestre	Field Maple	tree	H
Salix spp.	Goat/grey willow	tree	H
Crataegus monogyna	Hawthorne	tree	H/W
Corylus avellana	Hazel	tree	H/W
Ilex aquifolium	Holly	tree	H
Aesculus hippocastanum	Horse Chestnut	tree	H
Quercus spp	Oak	tree	H/W
Salix fragilis	Willow, crack	tree	H
Ulmus glabra	Wych elm	tree	H
Geum urbanum	Avens, wood		H
Calystegia sepium	Bindweed, hedge		W
	Bluebell, hybrid		W
Rubus fruiticosus	Bramble		H/F
Tamus communis	Bryony, Black		H
Arctium minus	Burdock		H
Ranunculus repens	Buttercup, creeping		F
Ranunculus acris	Buttercup, meadow		F
Silene dioica	Campion, red		H
Silene alba	Campion, white		H
Galium aparine	Cleavers		F/H
Geranium molle	Crane's bill, dovesfoot		F
Taraxacum vulgaria	Dandilion		F
Rumex obtusifolius	Dock, broadleaved		F
Digitalis purpurea	Foxglove		H
Heracleum sphondylium	Hog Weed		F
Hedera helix	Ivy		H
Centaurea nigra	Knapweed		F
Polygonum aviculare	Knotgrass		F
Malva sylvestris	Mallow, comon		H

Mercurialis perennis	Mercury, Dog's	W
Cerastium fontanum	Mouse-ear	F
Urtica dioica	Nettle	H/F/W
Plantago major	Plantain, broadleaved	F
Plantago lanceolata	Plantain, ribwort	F
Senecio jacobaea	Ragwort	F
Polygonum persicaria	Redshank	F
Rosa canina	Rose, dog	H
Rosa arvensis	Rose, field	H
Prunella vulgaris	Selfheal	F
Rumex acetosa	Sorrel	F
Rumex acetosella	Sorrel, sheep's	F
Sonchus asper	Sow-thistle, prickly	F
Veronica persica	Speedwell, common field	F
Cirsium arvense	Thistle, creeping	F
Cirsium vulgare	Thistle, spear	F
Lotus corniculatus	Trefoil, bird's foot	F
Epilobium hirsutum	Willowherb, hairy	F
Achillea millefolium	Yarrow	F