

Overton Hedgerow Survey Report 2014

SUMMARY

Resurveying a sample of biodiverse and 'at risk' hedges in the parish of Overton 2014 revealed the physical condition to be similar to that in the original surveys conducted during 2004, 2005 and 2006. One 'at risk' hedge had been lost to housing development. There was a slight overall decrease in biodiversity of the hedgerow species, with the ground flora also showing lower diversity. However, no firm conclusions about decrease in biodiversity can be drawn from the sample size of 7 hedges which were not all re-surveyed in the same month as the original study.

Further 'at risk' hedges will continue to be identified by OBS. Where these relate to housing development, surveys will be conducted to establish condition and biodiversity to inform developers of the value of the hedgerow resource and potential for conservation, enhancement and new planting.

Introduction

In March 2004 the Overton Biodiversity Society (OBS) published a preliminary report on its survey of a sample of hedgerows in the parish of Overton carried out in the summer of 2003 [1]. In March 2005 a final report was produced which also included hedgerows surveyed in 2004 and some further hedges as part of a survey organised by the Hampshire Wildlife Trust (HWT) and the Campaign to Protect Rural England (CPRE) [2]. A number of additional hedges have been surveyed when identified as 'at risk', for example on or adjacent to sites for new housing development.

In 2014 it was decided to repeat survey a small sample of hedges and for this purpose five were selected as representing some of the most biodiverse found in previous surveys and five which were regarded as particularly "at risk" based on their condition or location.

Method and Data Collection

The selected hedges were surveyed in summer 2014 by pairs of volunteers from OBS using the same (national standard) method as in previous surveys and using the standard field survey form [3]. To facilitate data analysis, an Excel spreadsheet was developed to digitally record and analyse the data. Particular attention was paid to the physical condition of the selected hedges and the number of different species found in the sample area of each hedge. Ground flora was not analysed in detail, but a simple count made of the number of different species found in the sample quadrats Q1 and Q2.

Unfortunately, one pair of volunteers was unable to survey their allocated hedges so the sample reduced to eight. Also, as shown below, one hedge had been removed during housing development.

Table 1. Selected data from the 2014 resurveyed hedges

Grid Ref	OBS Ref	Side	Height	Width	Integrity	X-section	# Species	Ground Flora	
								#Q1	#Q2
SU5287 4574	BNW1	W	2.1-4m	2.1-4m	stockproof	unclipped	13	9	7
SU5037 5183	BSE1	E	1.1-2m	2.1-4m	stockproof	overgrown&outgrowth	8	7	6
SU5263 5104	CFW1	W	2.1-4m	1.1-2m	gaps (Sig)	clipped&dense	4	12	7
SU513 493		E	2.1-4m	2.1-4m	stockproof	clipped&dense	12	5	6
SU5110 5019	RXE1	W	4.1m+	2.1-4m	stockproof	overgrown&outgrowth	10	8	10
SU5162 4741	GXW3	E	4.1m+	2.1-4m	leggy (Sig)	overgrown&leggy	11	13	8
SU5151 5052	S1	S	0	0					
SU5157 5059	S2	W	2.1-4m	2.1-4m	leggy (Minor)	overgrown&leggy	6	6	6

Comparison with Previous Surveys

To develop a simple broad comparison of physical condition the data on “Integrity” and “Cross-section” were conflated into a single three-level measure according to the rules in Table 2 where green = “good”, amber = “fair” and red = “poor”.

Table 2. Rules for combining Integrity and Cross section

X-sect >	Clipped & dense	Mechanically cut	Unclipped	Overgrown & outgrowth	Overgrown & leggy
Integrity v					
Stockproof					
Wind shaped (Minor)					
Wind shaped (Sig)					
Leggy (Minor)					
Leggy (Sig)					
Gaps (Minor)					
Gaps (Sig)					

A comparison of the physical condition of the hedges with their condition during the earlier surveys is shown in Table 3.

Table 3. Comparison of physical condition of hedges between 2004/5/6 and 2014

Grid Ref	OBS Ref	Side	Date then	Date now	Condition then	Condition now
SU5287 4574	BNW1	W	28/08/04	15/06/14	good	good
SU5037 5183	BSE1	E	08/08/04	18/08/14	fair	fair
SU5263 5104	CFW1	W	21/07/04	13/06/14	fair	fair
SU513 493		E	29/07/06	13/06/14	good	good
SU5110 5019	RXE1	W	19/04/04	18/08/14	fair	fair
SU5162 4741	GXW3	E	06/06/04	15/06/14	poor	poor
SU5151 5052	S1	S	21/07/05	28/06/14	good	REMOVED
SU5157 5059	S2	W	21/07/05	28/06/14	poor	poor

To develop a simple broad comparison of biodiversity, the number of shrub species and the number of different ground flora in the two samples were noted. The number of ground flora was taken as

the maximum of the number of different species recorded in quadrats 1 and 2. Table 4 provides a comparison of the diversity of the sampled hedges.

Table 4. Comparison of biodiversity of hedges between 2004/5/6 and 2014

Grid Ref	OBS Ref	Side	Date then	Date now	Species then	Species now	G/Flora then	G/Flora now
SU5287 4574	BNW1	W	28/08/04	15/06/14	11	13	19	9
SU5037 5183	BSE1	E	08/08/04	18/08/14	12	8	19	7
SU5263 5104	CFW1	W	21/07/04	13/06/14	11	4	15	11
SU513 493		E	29/07/06	13/06/14	16	12	17	10
SU5110 5019	RXE1	W	19/04/04	18/08/14	11	10	14	10
SU5162 4741	GXW3	E	06/06/04	15/06/14	12	11	13	13
SU5151 5052	S1	S	21/07/05	28/06/14	11		9	
SU5157 5059	S2	W	21/07/05	28/06/14	6	6	7	10

Discussion, Conclusions and Recommendations

Table 3 shows that the physical condition of the hedges surveyed has not changed greatly except for the obvious removal of one (previously good) hedge during housing development. Table 4 shows a slight overall decrease in biodiversity of the hedges although it is not possible to draw firm conclusions due to the small sample size. Generally ground flora was found to be less diverse, which in some cases may be the result of surveying at a different time of year rather than an actual decrease in number of species.

It is intended that the two unsurveyed hedges which were originally selected for re-surveying will be surveyed during summer 2015. Ideally, the same hedges should be periodically surveyed at least every 10 years and, if volunteer effort is available, further hedges included in the sample.

The removal of hedge S1 (at Foxdown) was a result of housing development and, with increasing pressure of such development in Overton, it would be prudent to identify new “at risk” resulting from their location on or near to potential development sites. Surveying these would provide baseline information on condition and biodiversity of hedges to landowners / developers and inform conservation, replanting, or new planting to enhance biodiversity.

References

[1] <http://www.overton-biodiversity.org/resources/docs/hedge-report-2003.pdf> [Accessed 03/01/15]

[2] <http://www.overton-biodiversity.org/resources/docs/hedge-report-final.pdf> [Accessed 03/01/15]

[3] Bickmore C.J. (2002). *Hedgerow Survey Handbook: a standard procedure for local surveys in the UK*. Countryside Council for Wales, Bangor. ISBN 1-86169-108-4.