

Hedgerow Survey Report

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Summary: During the summer/autumn of 2006, a hedgerow condition survey was carried out using grant aid from DEFRA. Preliminary results and conclusions are presented in this report. In general the hedgerows surveyed were in good condition. The complementary land use survey suggested that hedges were not in such condition. The disparity is being investigated

Background

1. In June 2006, the Board was awarded a grant of £4,955 by Defra to carry out a hedgerow survey across the AONB. The aim of the survey was to gather information on hedgerow characteristics and condition. This survey was complementary to the Land Use Survey on which a report was given at the last Board meeting.
2. The fieldwork was carried out between August and October by field surveyors. They collected the following information for hedgerow:
 - Length, width and height of each section
 - Continuity of hedgerows
 - Adjacent land use
 - Number of connecting hedgerows
 - Associated features (i.e. fence, bank, verge, ditch)
 - Hedgerow management (trimmed, untrimmed, tall, laid)
 - Number and identity of woody species
 - Number and species of hedgerow trees.
 - Nutrient enrichment indicators (dock, cleaver, nettle)
 - Species in the associated ground flora
4. Landowner permission was required for all hedges included in the survey.

Initial Findings

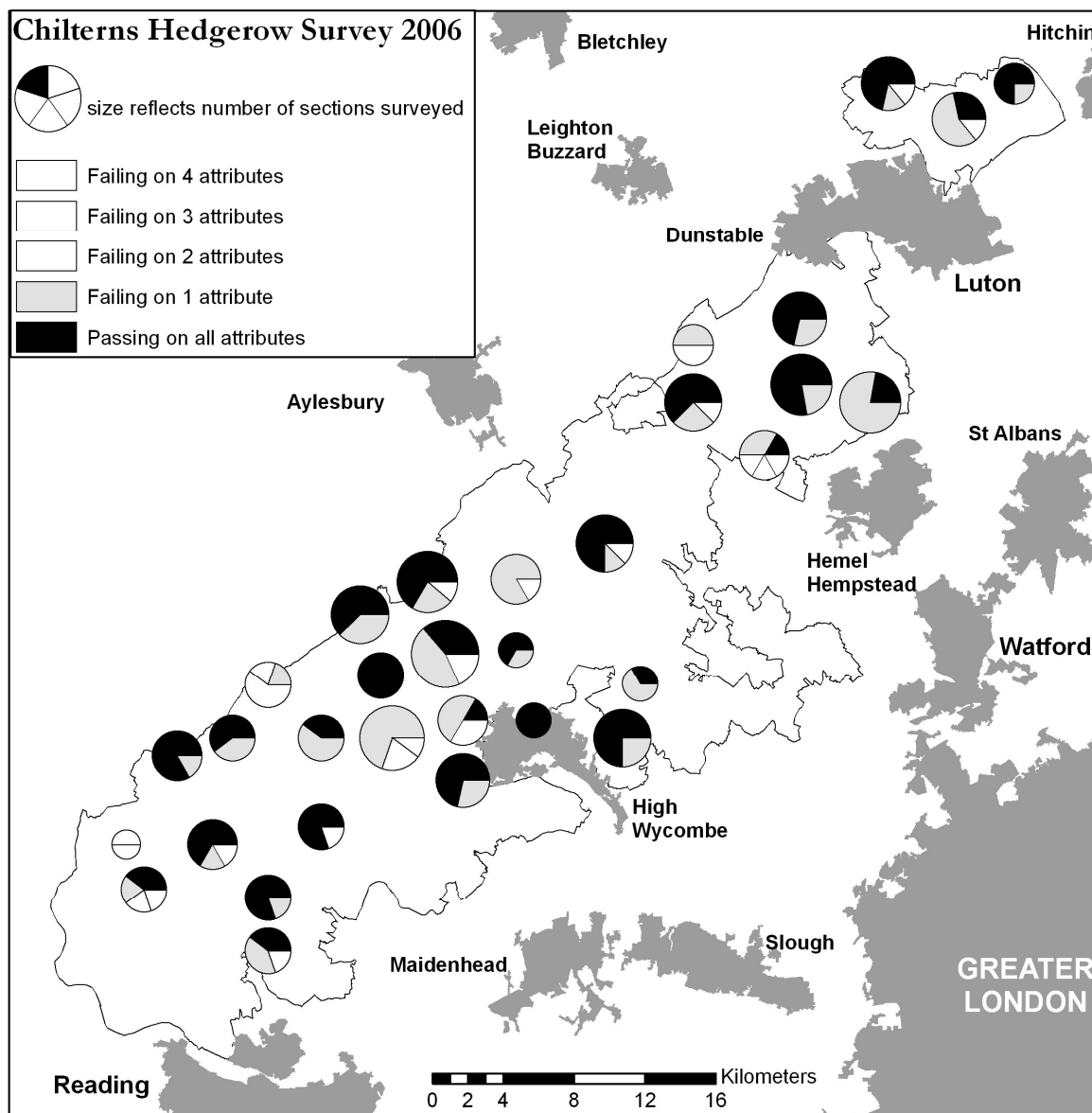
5. One hundred and ninety seven hedgerow sections were surveyed in 33 one kilometre squares. One outcome of the survey was an assessment of hedgerow condition using five attributes. Table 1 below shows the number and percentage of hedgerow sections reaching favourable condition against each attribute

Table 1

Attribute	Definition of favourable condition	Conservation Issue	Sections achieving this attribute	
			By number	%
Size	Cross-sectional area of at least 3m ² , and Hedge at least 1m high x 1.5m wide	Loss of shelter for fauna and in particular, unsuitable nesting habitat for most birds.	177	90%
Integrity/ Continuity	Less than 10% gaps and gaps not exceeding 5m wide	Reduction in habitat continuity.	168	85%
Height of base of canopy	Average height of lowest leafy growth no more than 0.5m from the ground.	Gaps at the base of the hedgerow mean that shelter for invertebrates, small mammals, amphibians and reptiles is lost.	153	78%
Width of undisturbed ground and herbaceous vegetation cover	At least 2m undisturbed ground from centre of hedgerow to edge of ploughed or cultivated land, and At least 1m perennial herbaceous vegetation cover from centre of hedgerow to disturbed bare ground or cultivated crops.	Relates to management close to the hedgerow which is likely to damage woody species, e.g. by harming their roots. Herbaceous vegetation is an important part of the hedgerow habitat as many animals rely on it for shelter, foraging and nesting.	154	78%
Recently introduced, non-native shrubs	Less than 10% cover of recently introduced species in the hedgerow woody component.	Can be seriously detrimental to the structure, diversity and ecological value of a hedgerow.	195	99%

7. 100 sections (51%) passed all condition assessment criteria (5 attributes) and can therefore be said to be in good condition.

- 68 (35%) failed on only one out of 5 attributes
- 19 (10%) failed on 2 out of 5 attributes
- 8 (4%) failed on 3 out of 5 attributes
- 2 (1%) failed on 4 out of 5 attributes



8. Reasons for failure

1. The most common reason for failure was that the base the hedge was thin and leggy. Reasons for this could be stock grazing or that the hedge has been allowed to grow tall.
2. The second most common reason (almost equal numbers of hedges) was that there was no strip of undisturbed ground with perennial herbaceous vegetation next to the hedge – possibly due to farmers cultivating too close to the hedge, or spraying herbicide too close.
1. The third most common reason for failure was ‘gappiness’ – i.e. neglect making the hedge not stock proof (maybe gaps filled with fences). Gappiness can be caused by livestock but also over management where annual flailing eventually causes a number of plants along the

hedge to die. Over management will also be responsible for short narrow hedgerows which also fail the condition criteria.

2. The fourth most common reason was hedge size (too short, or too narrow, or both).
9. There is anecdotal evidence not recorded in this survey that road side hedges are being allowed to grow tall. This changes the characteristics of the hedge and restricts views from the road over adjacent countryside.

Conclusions

10. The fact that half the hedges surveyed (51%) passed all 5 attributes in Defra's condition assessment is encouraging. However this result has to be treated with a degree of caution as the sample selection may exhibit bias. It was a condition of DEFRA that all landowners gave consent for the survey work - no hedges were surveyed from public rights of way without the landowners consent. Consequently, the majority of landowners contacted were known to the Board and it is likely that many of them carry out sympathetic land management already. Inevitably some parts of the AONB were not surveyed as intensively as might have been hoped for.
11. Non-agricultural holdings were under-represented in the survey, and it may be that hedges on such holdings are at particular risk of degradation in future years. This is an area where further research is needed, including continuing the work of building the Board's contacts with non-traditional landowners, and awareness - raising about the importance of good hedge management.
12. It is unclear why so many sections were found to have disturbed ground next to the hedge. One contributory factor may be that the requirements farmers have to adhere to in order to receive their Single Farm Payments (agricultural subsidy) are less exacting in this regard than the criteria (provided by Defra) used for this survey.
13. Over the few years it is likely that there will be benefits to hedge condition through the support provided by the Environmental Stewardship Schemes – in particular the Entry Level Scheme. Under the Entry Level Scheme (ELS) farmers can readily receive support for managing their hedgerows sympathetically.
14. Up until December 2006 there were 190 ELS agreements within the AONB. Hedgerow options are very popular with farmers as many were already carrying out such management before introduction of the ELS. However, we do not have details of which ELS options have been chosen and their location as these are not mapped by NE.
15. ELS does not provide any capital payments for coppicing, laying or planting. These are covered in Higher Level Stewardship (HLS) along with another HLS option 'Maintenance of hedgerows of very high environmental value' (£27/100m). This includes hedges supporting target species of farmland

birds, insects or mammals, or which make a local landscape character and/or historically important boundaries.

RECOMMENDATIONS

That the Board:

- 1. Develops an action programme to improve the condition of hedges.**
- 2. Continues to encourage farmers to take up hedgerow management options within Stewardship schemes.**
- 3. Continues to seek to engage with non-farming landowners to encourage sensitive management of hedges.**
- 4. Investigates whether local groups could be involved in future surveys.**
- 5. Incorporates the hedgerow survey within the land use survey.**