Agreement scale monitoring of Environmental Stewardship 2013-4

Assessing the impact of advice and support on the environmental outcomes of HLS agreements'

Natural England Contract reference LM0432

Final Report January 2014

Authors : Nigel Boatman [1]
Chris Short[2]
John Elliott[3]
Yiying Cao
Pete Gaskell[2]
Caroline Hallam[1]
Ruth Laybourn[1]
Johanna Breyer[4]
Naomi Jones [1]

[1] The Food and Environment Research Agency, Sand Hutton, York, YO41 1LZ, UK
[2] Countryside and Community Research Institute, University of Gloucestershire, Oxstalls Campus, Gloucester , GL2 9HW
[3] ADAS UK Ltd., Unit 1, Ground Floor, Rubicon Square, Pentagon 2, 4205 Park Approach, Thorpe Park, Leeds, LS15 8GB
[4]Environment Systems Ltd., 11 Cefn Llan Science Park, Aberystwyth, Ceredigion,

CONTENTS

ACKNOWLEDGEMENTS

The project team would like to thank the agreement holders and their representatives for their time during interviews and provision of access to their land for the field survey.

We would also like to thank the research teams at each organisation:

Fera: Simon Conyers, Alistair Huntly, Sue Thurley

CCRI: Melissa Affleck, Carol Kambites, Nick Lewis, Rob Berry, Katarina Kubinova

ADAS: Danny Ardshire, Sonia Brunton, Emma Davis, Richard Ellis, Chris Forster-Brown, Francesca Lemon, Ken Milner, Heather Scott, Steve Shepherd, James Simpson, James Towers, Fiona Tweedie.

We are grateful to Terry Blair of Environment Systems Ltd for his sterling efforts on database construction and management. YiYing Cao of ADAS assisted with data analysis and Alison Riding provided management input in the early part of the project.

Finally we would like to thank the Natural England (NE) and Defra staff who formed the steering group for their guidance through the project: Lindsey Clothier, David Fernall, Andrew Cooke, Jilly Hall, Steve Peel and in particular Lesley Blainey the NE Project Officer.

This project was supported by the Rural Development Programme for England, for which Defra is the Managing Authority, part financed by the European Agricultural Fund for Rural Development: Europe investing in rural areas

It is part of the Environmental Stewardship (ES) monitoring and evaluation programme, providing an evidence base for the effectiveness of ES.

GLOSSARY OF TERMS

AH	Agreement Holder
CI	Capital Item
ES	Environmental Stewardship
HLS	Higher Level Stewardship
IoS	Indicator of Success
MP	Management Prescription
NE	Natural England

EXECUTIVE SUMMARY

Introduction

Higher Level Stewardship (HLS) was introduced in 2005 as part of the Environmental Stewardship (ES) Scheme, to replace income foregone, and to provide advice and support to farmers who manage land for important environmental benefits. This project aims to provide evidence of the impact of advice and support on the achievement of HLS agreement and scheme outcomes, to inform delivery of agri-environment schemes under the next Rural Development Programme.

The project objectives (in brief) were:

- to assess progress towards the achievement of intended HLS agreement outcomes, including feature condition in relation to Indicators of Success,
- to assess observed results of management in relation to management prescriptions,
- to assess quality and appropriateness of advice and support provision, using information from agreement holders, Natural England (NE) staff and third parties,
- to evaluate the relationship between advice provision and progress towards, or achievement of, intended agreement outcomes.

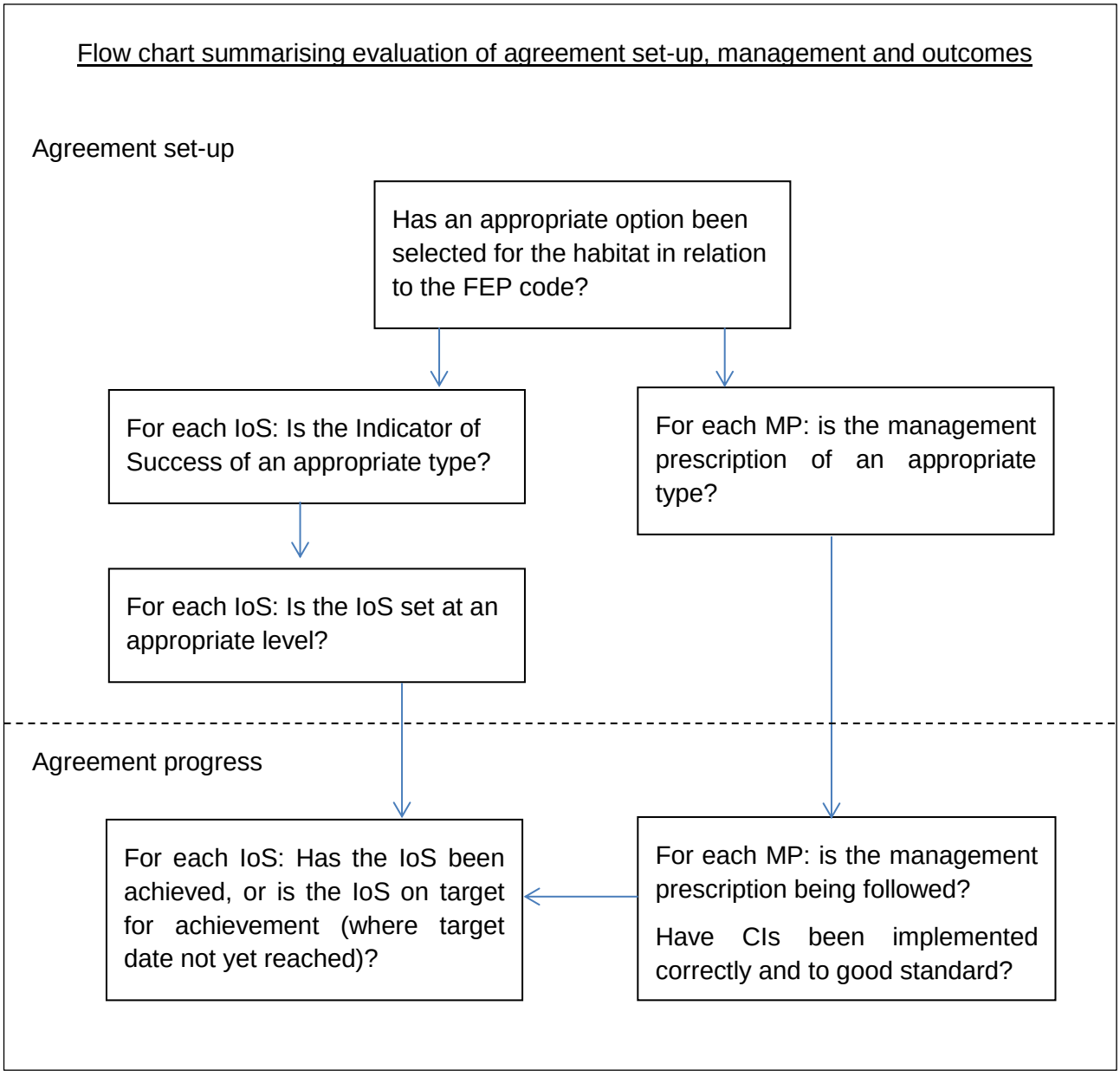
Project objectives were achieved through interviews with agreement holders and advisers, plus field assessments of habitats and features managed under HLS, for 100 agreements initiated before 2009. These were sampled from the national population of agreements and stratified across the eight NE budget regions. Up to four options were assessed for each agreement. The sample of agreements was representative of the population as a whole in terms of farm size distribution, and geographic distribution. Importantly, the sample included farmers with no previous agri-environment scheme agreement, comprising twenty two percent of sample farmers, as well as farmers with previous agreements in the Countryside Stewardship Scheme, Environmentally Sensitive Areas, and Entry Level Stewardship.

This project was run in parallel with another project (ref LM0433), which aimed to evaluate the quality of agreement set up, agreement holders' understanding of, and attitude to, their agreements, and impacts on the potential to achieve agreement outcomes. This work aimed to complement and support an NE desk-based QA exercise which was compared with the results of the field survey. Whilst the two projects are both concerned with the impact of advice and support, LM0433 is concerned with agreements established in 2013 under new Natural England (NE) guidance, and has more emphasis on processes of agreement establishment, whereas LM0432 is more concerned with the impacts of agreement set-up and subsequent management, advice and support on progress towards agreement outcomes.

Agreement set-up begins with a survey to produce a Farm Environment Plan (FEP) which allocates a code to the habitats present to indicate their conservation value. The FEP is used as a basis for choosing management options in the HLS agreement. Management prescriptions (MPs) are included to guide the agreement holder towards the correct management, and Indicators of Success (IoS) are also included as a way of determining whether an option is achieving its objectives. In addition to the management options, some

capital items (CIs) may be included in the agreement. These involve one-off actions, such as digging a pond or erecting a fence, in contrast to management activities that occur on an ongoing or annual basis. All these aspects were assessed during the evaluation.

The process is summarised in the graphic below.



Results

Objective 1: to assess progress towards the achievement of intended agreement outcomes, including feature condition in relation to Indicators of Success.

Ecological surveys were carried out on up to four options per agreement to assess progress towards achievement of environmental outcomes. The recording of habitat data was designed to allow assessment of the implementation of management prescriptions, status with respect to Indicators of Success, and progress with capital items.

Agreement set-up

Some changes from the original FEP code were noted in agreement documentation, but most of these were due to rotations or changes in categories. However, in some cases a parcel was put into the wrong FEP code, and while these errors were generally corrected by NE advisers in the agreement documents, in about ten cases this resulted in the parcel being entered into the wrong option.

The great majority (88%) of options chosen were appropriate for the habitat and parcel concerned, but 12% were assessed as inappropriate for a variety of reasons. All sampled options were deemed appropriate in 74% of agreements. For grassland, 18% of options chosen were questionable, in some cases because the FEP code allocated was incorrect.

IoS were assessed on a RAG (Red/Amber/Green) scale. Three percent of assessed IoS were considered to be of an inappropriate type (red); concern was expressed about a further 7% (amber). Five percent were considered to have been of an appropriate type but set at an inappropriate level, with concern about a further 19%.

Problems with IoS setting included vagueness and lack of clarity, failure to define terms and specify indicator species, lack of detailed vegetation map to locate habitats, lack of baseline data and repeatable methods for assessment of change, failure to specify responsibility for monitoring, use of IoS that were irrelevant to the site or parcel (including 'mandatory' IoS), and failure to specify when IoS should be achieved.

Agreement outcomes

Sixty one percent of IoS had been achieved, with a further 18% on target, but 21% were thought unlikely to be achieved. IoS of inappropriate types or set at inappropriate levels were less likely to be achieved. Failure to follow management prescriptions accounted for 41% of the situations where IoS were not likely to be achieved. The rest were accounted for by some aspect of agreement set-up including inappropriate type, level, or timescale for the IoS (44%), incorrect FEP code, inappropriate option type, unclear or conflicting IoS, or inadequate management prescriptions (15%).

Objective 2: to assess observed results of management in relation to management prescriptions.

Agreement set-up

Ninety-seven percent of MPs were deemed to be appropriate for the option and parcel assessed.

Agreement outcomes

For MPs where a judgement could be made, it was considered that 89% were being followed correctly. As for IoS, inappropriate MPs were less likely to be followed.

Only 72% of capital items assessed had been completed by the due date. Nine percent were partially complete, and 19% had not been started. Of those that had been completed, 84% had been completed to a high standard, 12% were 'adequate' and 3% were poor.

CIs where several instances of non- or partial completion were noted included tree planting and management, fencing and boundary renovation, scrub and bracken control. In some

cases, it was clear that there had been no progress (e.g. no sign of tree planting), but in others, this initial management had been carried out but lack of maintenance had negated its effect; examples include an otter holt that had been washed away, and scrub that had been cleared but then allowed to regrow.

Objective 3: to assess quality and appropriateness of advice and support provision, using information from agreement holders, Natural England (NE) staff and third parties,

Face-to-face interviews were conducted with agreement holders for all the agreements and options assessed in the field, and also with Natural England advisers for those agreements. When NE advisers had only recently taken over an agreement, previous advisers were also interviewed if possible. Where third party advisers had a substantial impact on agreements, these were also interviewed where available. In the event, third party interviews were only carried out for 13% of agreements.

Agreement holder views on HLS and their agreements

The Agreement holders considered themselves to be clear in their understanding of the option concerned in 80% of cases. All but one of the agreement holders (99%) felt able to deliver the overall changes in management required by their HLS agreement. In terms of understanding, 86% of agreement holders thought their agreement was manageable, and 91% thought it was manageable in terms of implementation. Twenty five percent consulted agreement documentation regularly (several times a year), but a fifth looked at it hardly at all (less than once a year). Most (55%) look at the documentation 'occasionally', or once or twice a year. There was no link between those who found the agreement challenging and those who did not look at the agreement documentation.

Around 75% of agreement holders thought that their option management would be effective in achieving outcomes. Most thought that the management prescriptions were the best management to achieve the intended outcomes. Overall, 82% of the selected options fitted well with current farm management. There was little variation across the three main habitat types (grassland, woodland and arable). However negative comments reached 10% for grassland options, mostly concerning stocking rates or timing of management activity.

Eighty six percent of farmers had changed their management as a result of agri-environment funding. The survey reveals that management would have been similar in the absence of a HLS agreement for only 14% of options[1]. This shows a high level of additionality in HLS. It also indicates that without the scheme, the majority of the managed features would be at risk. Without an agreement, habitats would, in some cases, deteriorate through lack of management, whereas in others management would intensify.

The majority of the selected options (68%) that had been included in previous AES were being managed in a similar way under HLS. This indicates continuity, but it should not be assumed that similar means the same management.

[1] cf the recent evaluation of Entry Level Stewardship, where agreement holders indicated that 61% of features in options would have been managed in a similar way in the absence of the scheme (Boatman *et al*., 2013).

Agreement holders considered that they had achieved 51% of their objectives in relation to individual options; 45% had been partly achieved and 4% not achieved. These option-based assessments were recoded into a three-level category at the agreement level. Here all agreement objectives had been fully achieved in 30% of cases, some in 39% and none in 31%.

Agreement holder views on advice and support received

Advice had made agreement holders more aware of the target feature and management prescriptions for 68% and 77% of selected options respectively. Agreement holders were aware of the IoS for 70% of options, and felt that they had been clearly explained for nearly 60% of selected options; however, in 15% of cases they considered them to be unclear. For grassland options, 20% were unclear. However, agreement holders felt that they understood what management was required in nearly 80% of cases, and this was unclear in less than 10% of cases.

The agreement holders considered that the advice was 'practical' for 72% of the selected options, and 'not practical' for only 5%. The negative response rate was slightly higher for arable options, suggesting that fitting HLS options alongside arable operations can still be a challenge for some agreement holders.

Seventy-one percent of agreement holders said that the advice they had received had been important or very important to the successful delivery of their HLS agreement. Two thirds thought that the objectives at the start of the agreement were reasonable, rising to 86% at the time of the interview.

Many agreement holders were concerned about the number of changes in project officers. Only 24% of agreements had experienced no change, with one change in 48%, 3-4 changes in 19% and five or more changes in 4% of agreements. On average, 17% of agreements changed adviser every year. In a small proportion of cases, AHs did not know the name of their current adviser. The reasons for these changes were often retirement of individual advisers or changes in regional boundaries. In many cases there was an official handover but this was not always possible.

Continuity of support was also an issue. Some of the current NE officers had also not visited the site and only spoken to the agreement holder on the telephone. A number of agreement holders expressed the view that they would have liked more follow-up support and feedback once the agreement was established and, in some cases, assistance with communicating the benefits to the wider public.

Views of advisers

Natural England (NE) advisers were asked about the agreement holder's capacity for, and understanding of, HLS and the role of advice and support in securing the best possible environmental outcomes. The NE officers considered that 46% of agreement holders had strong environmental knowledge at the start of the agreement, and 16% were thought to be 'weak'. Advice was felt to be crucial to agreement success in 39% of cases, and important in a further 27%. Advisers indicated that 86% of agreement holders understood the advice very well or fairly well. Just over 81% were considered to have a good grasp of the environmental outcomes of the options.

The comments from the NE advisers indicated that they would like to visit agreement holders more frequently but the reality was that this was not always possible due to limitations of resources. .

Objective 4: to evaluate the relationship between advice provision and progress towards, or achievement of, intended agreement outcomes.

An agreement-level analysis was carried out using Spearman's rank correlation to test relationships between 'input indicators' of agreement holder (AH) characteristics, advice metrics and agreement complexity, and 'output indicators' covering agreement establishment (set-up) and outcomes.

AH characteristics included ownership of decision to enter agreement, influence on selection and placement of agreement options, knowledge of agreement objectives and IoS, commitment to agreement outcomes, capacity to deliver agreement outcomes and perspective on agreement success. Advice metrics included quantity, quality, timeliness and consistency of advice and support received.

Indicators contributing to agreement set-up related to appropriateness of options, type and level of indicators, and management prescriptions. Delivery of outcomes was measured by achievement of IoS and whether MPs had been followed.

Complex agreements tended to have lower levels of appropriate options and management prescriptions that were correctly followed, and complexity also negatively affected delivery of outcome. A positive correlation was found between the quality of the agreement set up and outcomes.

No significant correlations were found between AH characteristics or advice input and agreement set-up or outcome indicators. This should not be taken as an indication of lack of influence of advice on outcomes; rather, it arises because the distribution of most scores was at the upper end of the range, for both input and outcome indicators, and because of the interaction between multiple factors, which reduced the value of the analysis.

Outliers were examined to obtain further insight through more detailed case studies. Where AHs had poor knowledge and outcomes were also poor, AH's tended to be disengaged, rarely referred to documentation and did not agree with the management prescriptions. Where AH knowledge was poor but outcomes were nevertheless good, this tended to be in cases where transfer had occurred from classic schemes, with similar management continuing under HLS. An important point emerging from these case studies is that AHs do not always know if they need advice as there is no incentive for them to seek it out and without monitoring or evaluation, this would be missed.

Since complexity also negatively affected delivery of outcome, further analysis was carried out on a subset of more complex agreements. This showed that AH knowledge has a significant impact on outcomes for such agreements (in addition to agreement set-up), indicating the importance of ensuring that AH's are sufficiently well informed to manage such agreements effectively.

Discussion

Performance was good for most of the metrics examined, with the majority of agreements working well. However, in a minority of cases there were problems in one or more areas, and the discussion concentrates on the areas where there is scope for improvement.

The agreement set-up was identified as a key part of the process, with more problems arising from issues with the establishment of the agreement than from incorrect implementation of management prescriptions by agreement holders[2]. Indicators of success were a particular problem area, both in terms of appropriateness and presentation.

Lack of follow up visits and changes in adviser personnel led to a sense among agreement holders that early expectations in terms of support were not fulfilled throughout the life of the agreement. In some cases this led to increasing disillusionment and declining commitment as the agreement progressed.

Other areas of concern related to option flexibility, feedback on progress, public perception of scheme benefits, and agreement complexity.

Finally, there were some indications that problems occurred more frequently with grassland options than for other types of habitat, and it is suggested that particular attention should be paid to these as they account for nearly half of all options.

Recommendations

Ten recommendations are made for consideration in future schemes. These are listed in brief below; see section 7.4 for full versions.

1. Agreement set-up: choice of options, IoS and MPs: Delivery processes need to allow for tailoring of IoS and MPs to ensure that they fit the site and NE POs need a good knowledge of the site to avoid the errors which result from reliance on inadequate FEP maps. They also need to ensure that the IoS are achievable and the management prescriptions are practical.

2. On-going monitoring and support in relation to capital items: To maximize achievement of option objectives, it is necessary to check that capital items are installed and management prescriptions are implemented, but also to provide the flexibility to adjust them if they are not delivering the expected outcomes.

3. Agreement set-up: Part 3 documentation: Documentation needs to be written in non-technical language, with concepts and terms clearly defined. It should present the objectives and IoS for the agreement as a whole, for each option, and for each parcel or group of parcels where these have different starting points/outcomes.

4. Indicators of Success: IoS should be clear, appropriate and set at sensible levels for the option and parcel in question. It should also be clear whose responsibility it is to monitor them, and where change is indicated, baseline data should be collected. If the agreement holder is expected to monitor progress then the IoS should relate to attributes of features or

[2] See also project LM0433, for information on agreement set-up of agreements established in 2013 under new Natural England (NE) guidance.

species that are readily recognisable by the agreement holder. Where applicable, SSSI assessment criteria should be included, not detailed in a separate document.

5. Changes in NE advisers: Where changes are required a set of principles should be established and this should be part of the documentation received by the agreement holder, so that the agreement holder knows what to expect, and what should not happen in the event of a change in project adviser.

6. Option flexibility: The degree of flexibility in management for each option should clearly be stated and what can't be adjusted equally made clear in the documentation and advice provision.

7. Follow-up visits and feedback on progress: Establishment of discussion groups to enable the NE Adviser to engage with a number of agreement holders facing similar challenges could be a way of providing support without the need for individual visits. However, follow-up visits to monitor progress are still required to ensure that AH responsibilities are being fulfilled. This is especially the case for capital items (see recommendation 2 above).

8. Publicity: Better publicity for good results could be beneficial to the public perception of the scheme, as well as making agreement holders feel that their efforts were appreciated.

9. Complexity of agreements: Unnecessary complexity should be avoided and where agreements are complex, additional care should be taken to ensure that the agreement holder has the capacity and understanding to deliver the agreement. Also, extra care needs to be taken in setting up the agreement, progress should be carefully monitored and extra support provided if needed.

10. Grassland options: NE advisers should take particular care during the setting up of agreements to ensure that grassland options are appropriate for the situation, and that agreement holders are fully cognisant of the objectives and their responsibilities under these options.

1 INTRODUCTION

1.1 Background

Higher Level Stewardship (HLS) was introduced in 2005 as part of the Environmental Stewardship (ES) Scheme, to provide support to farmers in managing land for important environmental benefits (Natural England, 2013). It is run under the Rural Development Programme for England (RDPE) and contributes to strategic priorities for biodiversity, natural resource protection, sustainable farming and food and sustainable rural communities. Agreements under the HLS strand of ES are developed by the land manager with support from Natural England (NE) Project officers and input from other organisations that give advice to farmers.

Although the importance of providing good quality advice and support in the achievement of outcomes from agri-environment scheme agreements is widely recognised, the evidence base is largely anecdotal. This project aimed to assemble more substantive evidence of the impact of advice and support on the achievement of Higher Level Stewardship (HLS) agreement and scheme outcomes, in order to inform delivery of agri-environment schemes under the next Rural Development Programme. It studied HLS agreements established before 2009, which had therefore been in progress for at least five years. This allowed an assessment of progress towards achievement of agreement objectives and the influence of advice and support upon this progress.

1.2 Objectives

The project objectives are:

1. to assess progress towards the achievement of intended HLS agreement outcomes, including the assessment of feature condition in relation to agreement Indicators of Success,
2. to assess observed results of management in relation to agreement management prescriptions,
3. to gather and analyse information on advice and support provision in order to assess its quality and appropriateness, including information from agreement holders, NE staff and third parties,
4. to evaluate the relationship between quality, appropriateness and timing of advice provision and progress towards or achievement of agreement outcomes.

1.3 Relationship with other work

This project was run in parallel with another project (ref LM0433), which aimed to evaluate the quality of agreement set up for agreements established in 2013 under new Natural England (NE) guidance, to assess the agreement holders' understanding of, and attitude to, their agreements, and the impacts of these factors on the potential to achieve agreement outcomes. This work aimed to complement and support an NE desk-based QA exercise which was compared with the results of the field survey. The objectives were to provide an assessment of:

- the appropriateness of option placement, intended agreement outcomes and management prescriptions,
- agreement holder understanding of, engagement with and attitude towards agreement requirements, intended outcomes and prescriptions,
- the quality of agreement establishment as a foundation for future delivery,
- the impact of agreement holder understanding and engagement and quality of agreement establishment on the potential to achieve agreement outcomes.

Whilst the two projects are both concerned with the impact of advice and support, and were similar in a number of ways, LM0433 is concerned with newly established agreements and had more emphasis on processes of agreement establishment, whereas LM0432 is more concerned with progress towards agreement outcomes.

2 METHODOLOGY

The project objectives have been achieved through a combination of: i) interviews with agreement holders; ii) interviews with those providing advice and support; and finally iii) field assessments, to evaluate the condition of habitats and features being managed under the scheme, and hence progress towards achieving the intended outcomes of the agreement.

There were similarities between the methods used for this project and those used in LM0433, but LM0433 focused more on the FEP and the details of agreement set-up, and field work was used as a basis for assessing the quality of agreement establishment as a foundation for future delivery. In contrast, LM0432 focused on the impact of advice and support on agreement outcomes, the implementation of management prescriptions set out in the agreement documentation, and progress towards achievement of objectives as defined by Indicators of Success.

2.1 Selection of agreements for survey

Natural England provided a random sample of 200 agreements that had been stratified across the eight NE budget regions, the number of sample agreements in each region reflecting the number of live agreements in the region. These agreements were all initiated before 2009[3]. A sample of 100 agreements (with the same stratification) was selected randomly by the Food and Environment Research Agency (Fera) with the remaining 100 providing a reserve list. The sample was not stratified by habitat/option type as the aim was to obtain a sample that was representative of the population of agreements as a whole.

Agreement holders were first contacted to arrange an interview, which was then followed up by field assessments. In some cases, the original selections could not be interviewed and the reserves were accessed. There was no impact on the regional divisions within the sample. In the event, 102 interviews were carried out, as two agreement holders subsequently refused permission for field work and these agreements therefore had to be substituted.

NE provided a dossier of information for each sample agreement, containing the following documents. The actual content of each dossier reflected the availability of these documents.

- Initial agreement document:
    - The agreement map (Part 7)
    - Part 3 containing the option descriptions, management prescriptions (MPs) and indicators of success (IoS)
    - Parts 4 and 5 containing capital item specifications and management plan briefs
    - The FEP including maps and the form with feature descriptions.
- Current agreement document:
    - The agreement map (Part 7)
    - Part 3
    - Part 4 and 5

[3] One agreement in the final 100 had a start date of 2012

- Notes produced in developing the agreement to explain and justify decisions, option choices, prescription detail.

- Notes recording decisions about major amendments (not simply agreeing to minor derogations or roll-over of capital items),

- Correspondence with the applicant/agreement holder describing reasoning around the agreement offer or subsequent amendments, agreement aims, the agreement requirements and any iterative development of the agreement.

- Any inspection reports identifying significant issues, either very positive or negative, (around compliance, achievement of outcomes, agreement holder difficulties).

- Any reports on monitoring of feature condition and or agreement delivery.

- Any correspondence or notes relating to complaints by the agreement holder about support provided, process, or other difficulties.

- Contact details for the current adviser, the adviser who established the agreement and contact details for any significant third parties

There were occasions where documentation was missing from the agreement. Where documents were particularly important, NE staff were asked to search again but sometimes the document could not be found on the Genesis system. Surveyors were asked to undertake the work as thoroughly as they could with the information that had been provided. The main issues for surveyors arose where the FEP map or the agreement map (Part 7) was not provided and this led to complications where parcels had multiple FEP codes or options, because sufficiently detailed information could not be extracted from Part 2 of the agreement document in this situation. There were also problems where the Part 3 referred to a separate management plan for all or part of the site but this was not provided. There were also some Part 3 documents where a pre-existing management plan was incorporated into the Part 3 but was not structured in the normal way so that the IoS and MPs could not be easily identified. In this situation the IoS and MPs could not be assessed.

2.2 Selection of options

For each agreement in the sample all the 'ELS more of the same[4]' options were discounted. Options related to access and education were also discounted. The remaining HLS options were checked to ensure that they were in the initial agreement documentation, and were still present in the most recent agreement documentation. Any that had been 'dropped' or 'added' since the start of the agreement were discounted to ensure only options present throughout the life of the HLS agreement were assessed. Also, HLS options that were HLS when the agreement was set up, but had since been downgraded to ELS options were not included (for example in the 2008 HLS handbook HF13 was a HLS option, in 2013 it is in the ELS handbook as EF13).

From the remaining HLS options, a maximum of four main options were selected for assessment (supplements were not classified as a main option). In some cases agreements only had one or two options so the options to be assessed were self-selecting. Where

[4] i.e. ELS and OELS options over and above those required to meet the ELS/OELS points target.

agreements had more than four options a process was agreed by which the options for assessment were selected, to provide a range of key options under different themes/outcomes. This process took into consideration the following aspects, in the order presented:

1. important habitat types (including SSSIs) or themes
2. target area statements (where the agreement is in a target area identified via Magic (http://www.magic.gov.uk)
3. the degree of change expected (creation/restoration rather than maintenance if multiple options apply to the same habitat)
4. any other reasons including demanding management
5. area/cost.

2.3 Selection of parcels

Selection of a specific land parcel was made which contained the selected option. This enabled the interviewer to speak to the farmer about a specific land parcel for each option, and also ensured the field staff were able to visit the same parcel that had been discussed at interview. In some cases one land parcel contained more than one option, and in this case both options were assessed to follow the parcel based approach. Where the selected parcels included further supplementary options and capital items, these were also investigated where possible. In the case of rotational options, locations were identified at interview and one parcel selected at random by the interviewer.

2.4 Field assessments

The field surveyors are all highly experienced ecologists, with extensive experience in ecological surveying and monitoring, and an in-depth understanding of habitats and vegetation communities. They also have very good knowledge and understanding of current and past agri-environment schemes and agreement options and are experienced in communicating with to landowners.

A detailed field protocol was provided to guide surveyors, and a two-day training course was provided prior to the commencement of field work, during which instruction was given on how to conduct all the assessments required. During field work, a help line was provided which surveyors could call while out in the field to answer any queries arising.

The field methodology was based on/adapted from the methodology used for previous agreement scale monitoring of HLS (Mountford et al., 2013). The field procedures described below were designed to answer the project objectives 1 and 2. They were designed to provide the information necessary to determine whether the IoS had been achieved, or were likely to be achieved, and whether the management prescriptions were being followed (as far as this could be determined in the field).

The attributes to be recorded and issues for comment were selected for each habitat type based on the condition criteria in the FEP handbook, the IoS templates, and the Part 3 agreement documents for the sample sites. Where agreement documentation contained original and more recent versions of Part 3 (containing IoS and MP's) the option was assessed against the most recent version of Part 3 that had been supplied.

Field assessments were conducted as an independent exercise; while information from interviews was sometimes used to help understand what was happening, it did not influence the data collected.

There were five stages to the field work:

A. Recording Botanical and general variable Quadrats (1 set per FEP code)

B. Recording Habitat Variables for the whole parcel (one record per land parcel assessed)

C. Assessing Indicators of Success (1 set for each option)

D. Assessing Management Prescriptions (1 set for each option)

E. and Capital Items (CIs) (1 set for each parcel if present)

A) General quadrat variables were recorded for each FEP code associated with the selected option. These general variables included components such as slope, soil type, cover of undesirables and cover of surface water. Botanical quadrats (full species lists with percent cover) were recorded in arable and grassland habitats, woodland, moorland, coastal and wetland vegetation. Botanical quadrats were not collected when the target of the option was either historic environment or birds. Structural information (vegetation height at 40 locations) was collected for options that were targeted at enhancing habitat for birds.

The size and number of the quadrats recorded varied by habitat to account for the scale of the vegetation usually present;

- Grassland - 20 x 0.25m^2 quadrats
- Woodland - 15x 1m^2 quadrats for ground flora
- Moorland, coastal and wetland vegetation - 10 x 1m^2 quadrats

B) Habitat variable information was collected at parcel level, to allow an overall assessment of the condition and quality of the habitats that are present in the agreement. Variables recorded included the total cover of bare ground, % cover of trees, evidence of grazing.

C) Each Indicator of Success was assessed independently for each option. Where applicable the information collected from the quadrats and the habitat variables was used to assess the IoS. Examples where the quadrat data were directly applicable to assessing the IoS were the frequency of named indicator species (taken from the botanical quadrats) or the cover of bare ground (taken from general quadrats). The surveyor was asked to measure the IoS (where possible), comment on whether the IoS was an appropriate type, whether the IoS was set at an appropriate level, and whether the IoS was likely to be achieved within the lifetime of the agreement.

For the two questions ‘Is the IoS an appropriate type’ and ‘Is the IoS set at an appropriate level’ the surveyors were asked to categorise each IoS on a RAG (Red/Amber/Green) scale.

If the surveyor considered the IoS type to be completely inappropriate in the parcel they were surveying, it was recorded as Red, e.g. if it referred to a feature which was not present and unlikely to be present during the agreement, or if it was impractical in the location they were investigating e.g. IoS requiring cattle-grazing on a very steep slope. If the type was not entirely inappropriate, but the surveyor had concerns about it, then it was recorded as Amber, for example, an IoS which was not inappropriate in itself but which conflicted with

another objective, or was not clearly expressed or was too vague to measure (eg. IoS expressed as an aspiration without a target). If the surveyor considered the IoS type to be appropriate and feasible, it was recorded as Green.

The level at which the IoS was set, was considered separately. If the level was clearly inappropriate for the particular location, or not achievable in the timeframe, it was recorded as Red, eg. full tree canopy when trees just planted. If the level was thought to be a bit too high or too low or not ambitious enough, then it was recorded as Amber. If the surveyor considered the target level to be about right, then it was recorded as Green.

These are often difficult distinctions to make. The use of the RAG scores was discussed with examples on the training course, but ultimately it does rely on the experience of our surveyors to make a judgement in the context of each location. This was sometimes made more difficult because of the lack of detailed information on the previous management and condition of the habitat. Where the surveyors were uncertain, they were advised to give the benefit of the doubt, ie. only to use Red if an IoS was clearly inappropriate, only to use Amber if they had specific concerns, otherwise to record Green.

Surveyors were also asked to provide comments to support their RAG scores, and general comments on the IoS, and also to list/suggest any IoS that they felt had been missed but would have been valuable.

Surveyors were then asked to assess whether each IoS had been achieved at the time of survey, or if not, if it was on target to be met by the end of the agreement, or if it was unlikely to be met by the end of the agreement. They were also asked to provide reasons for their assessment. Some IoS could not be assessed at the time of survey, eg. wetness of ground in winter, presence of seed in winter, so were recorded as “Can’t Assess”. The question of whether the IoS had been or were likely to be achieved was considered separately from the appropriateness of the IoS type and level. Please see section 4.2.1 below for a discussion of progress towards achieving IoS.

D) Each management prescription was assessed, with the surveyor commenting on whether the prescription was being followed or not (where this was possible). In some situations it was not possible to assess and the surveyor was provided with the option to answer ‘can’t assess’ for such instances. Surveyors were also asked whether the management prescription was appropriate or not, and encouraged to provide general comments relating to the management prescriptions (issues with the ones provided, ones that have been omitted, inconsistency etc.).

E) Capital items within the parcel were assessed as to whether they had been completed, and the quality to which they had been completed. A comment was made if the capital item could not be found or could not be assessed for some other reason.

The information collected during steps A to E for each parcel, in combination with surveyor observations, was used to assist the surveyor in making a holistic judgement as to whether the correct option had been applied to the parcel. The current Farm Environment Plan (FEP) code for the habitat was also recorded, along with its condition based on the criteria in the FEP handbook, using the botanical data to guide this assessment.

Complications arose where the selected field parcel had either multiple FEP codes, or multiple options within a single RLR boundary (notably problematic on large upland parcels). Where such instances occurred the surveyors were given the following advice:

- Where a field or land parcel has been divided into different habitat areas with different HLS options, these should be assessed separately, even where there is no physical boundary; e.g. one field may be divided into two areas with one part in HK6 and the other part in HK7.
- Adopt the same approach in upland habitats, where for instance, there may be an area of moorland split between HL9 and HL10, or an area with the same main HLS option but one part having a supplement and the other part without. One or other may be selected for assessment; if both areas are selected, they should be assessed independently (as if two separate parcels).
- Where there is a parcel with a single main HLS option and a number of different FEP codes (e.g. moorland restoration of an area including M01, M04, M06, M07, V05), this should be assessed as one parcel in order to take a holistic approach to the assessment of outcomes for the main HLS option. However, it is accepted that the surveyor may need to be selective about the range of features they are able to sample, focusing on those habitats which are mentioned in the IoS. In the unenclosed uplands, surveyors may encounter very large parcels; it is accepted that they will only be able to assess part of the area; they should aim to look at the range of variation present, focusing on the vegetation types mentioned in the IoS, but taking into account accessibility.

The majority of field assessments were carried out from early June to early September 2014. Each agreement was visited at the time the surveyor deemed most appropriate having taken into consideration the selected options and the objectives of the option. For instance, agreements with grassland options having botanical interest were visited before hay was cut where possible. Agreements with resource protection and moorland/upland options were assessed early in the field season (April) and then re-visited to assess remaining options in the main summer survey window. Issues arose with some options, notably provision of wild bird seed which could not be surveyed at the optimal time. In these instances the surveyor was asked to complete the assessments listed above as fully as possible at the time of the visit.

2.4.1.1 Note on SSSIs

Forty-five options on 27 of the sample HLS agreements were wholly or partly on SSSIs. NE have developed an Integrated Site Assessment programme to assess the condition of Sites of Special Scientific Interest at the same time as the effectiveness of management under Environmental Stewardship. (Environmental Monitoring in Natural England 2012). This is based on the principles of Common Standards Monitoring as developed by JNCC (2004) whereby those special features (e.g. habitat, species, or earth science feature) for which the site was designated are assessed to determine whether they are in a satisfactory condition. Key attributes of the feature (e.g. extent, quality, supporting processes) are identified and targets set for each. If all the targets are met, the feature is in favourable condition. Each SSSI monitoring unit therefore has its own set of criteria by which it is monitored in addition to the IoS which apply to any part of it which falls within an HLS agreement. It was not part of the remit of this project to assess the SSSI condition criteria, which were not therefore provided in the dossiers to the surveyors. However, most HLS options which occur within

SSSIs include an IoS which requires the SSSI condition criteria to be met so that the SSSI unit is of 'favourable' condition. Our surveyors were not required to assess this IoS so it has been excluded from the analysis.

2.4.2 Data capture

Field surveyors were provided with hand-held tablets containing an access database to record all the field variables. This database was pre-populated with the selected options, IoS and MP's for each agreement. The database performed several basic calculations, e.g., sums of percentage cover values recorded on quadrats. This information was immediately available to the surveyors, enabling them to record any subsequent data and estimate e.g. progress towards achievement of Indicators of Success with this knowledge at hand and without the need for time-consuming manual calculations.

2.5 Interview Methodology

Interviews were conducted with agreement holders, NE advisers and third party advisers to provide information for objective 3 and to feed into objective 4.

2.5.1 Interviews with Agreement Holders

A structured questionnaire was developed and submitted to the Defra Survey Control Liaison Unit for approval (Appendix 1). The questionnaire was piloted prior to the main survey.

All of the interviewers from within the consortium were trained, with most attending a training event in Gloucester in January 2014. A structured process of informing and contacting the HLS agreement holders was developed. All agreement holders were sent a letter by Natural England (see Appendix 1). The agreement holder was then contacted by the interviewer on the telephone to arrange a convenient time for the interview. Before the interview the interviewer familiarised themselves with each HLS agreement by reading and analysing the maps and documents obtained from NE via the agreement dossiers. This included:

- Reading the 'justification of the agreement' documents where there was one;
- Reading the current Part 3 document and the work outlined under each of the options, especially those chosen for closer examination in the interview;
- Printing off the option summary from Fera, which highlighted the 2-4 Options chosen, the land parcel and the Capital Items that link to these.
- Printing off the current Part 7 options maps in colour on A3 paper.
- Locating these options and the land parcels to which they relate on the map.

Once the interview was completed the survey was entered on to the database and the annotated maps were copied and forwarded to the field surveyors, where the interviewer was not also doing the field survey. The maps were used to indicate location of rotational options plus any changes (e.g. removal of a field from an option or failure of a crop) which might affect which parcel surveyed, also sometimes access points or contact information.

The face-to-face structured interview with the agreement holders was based around an interview questionnaire made up of mostly closed questions (see Appendix 1). The interviews took about an hour and half to complete and there were 4 parts to the questionnaire:

- Section 1: covered the holding/farm business,
- Section 2: an overview of their engagement with AES.
- Section 3: a review of the overall HLS agreement and associated processes.
- Section 4: focused on the advice and support received from different parties and looked at between 2 and 4 options in detail. These were the options and parcels already chosen following the procedure described in sections 2.2 and 2.32.3 above, and covered by the field survey.

The interview questionnaire was developed to:

- establish the Agreement Holder's experience of implementing the HLS agreement;
- assess the level of understanding concerning the agreement objectives;
- evaluate the extent and impact of the advice (the provision of information) and support (subsequent help and encouragement) received on the agreement.

Where permission was granted the interviews were recorded, solely for the purpose of providing a basis for checking important points that came up during the interview. Most interviews took about an hour to an hour and half to complete.

2.5.2 Interviews with NE & third parties

During the agreement holder interviews the name and contact for the Natural England adviser and any third party adviser was established. This was checked against a spreadsheet received from NE, and the agreement dossier. The decision was taken to focus on the current NE adviser, whether or not they had visited the site, so that the overall assessment would encompass the process of hand-over between past and current advisers.

Initially, it was planned that NE advisers who were responsible for two or three agreements would be interviewed face-to-face. In the event no adviser was responsible for more than 2 agreements and in all cases they were happy for the interview to be over the phone. For all but one of the 100 interviews, an NE adviser was identified and interviewed. Where a change in adviser had taken place recently the previous adviser was also contacted meaning that more than one NE adviser was interviewed in order to secure a complete picture of a particular agreement. In such cases these are not recorded as separate interviews, but as a single record of responses by the NE advisers involved in the start-up and delivery of that agreement. Contacting the third party advisers was more difficult as most had been mainly involved in the preparation of the Farm Environmental Plan (FEP), which was at least 6 years ago. The intention was not to contact all FEP surveyors, but only FEP surveyors and other third party advisers who had played a significant role in support provision during the agreement term. In the end 13 interviews with third party advisers were completed. Therefore the number of interviews in this section is in excess of 125 interviews in total.

The telephone interview (Appendix 1) with the NE and third parties was based around a questionnaire made up of both open and closed questions. The interviews took about half an hour to complete and there were 5 parts to the questionnaire:

- Section 1: Background details on the agreement
- Section 2: Questions covering the start of the Agreement
- Section 3: How the agreement developed
- Section 4: Questions on agreement Delivery

- Section 5: The actual and anticipated agreement outcomes

The interviews intended to:

- provide an assessment of the Agreement Holder's environmental knowledge and attitude when the agreement was signed and how this might have changed;
- capture the views on agreement establishment as well as on option selection and placement;
- capture views on providing ongoing support during the agreement term, including pro-active 'care and maintenance';
- capture views on the role of third party adviser in influencing the establishment and/or delivery of the HLS agreement.
- assess the role of advice and support in enhancing the environmental outcomes;
- capture views on the areas of delivery of the agreement which worked well, or not so well (including changes in agreement holder knowledge and attitude).

Once the interview was completed the survey was entered on to the database.

3 OVERVIEW OF DATA

3.1 Description of data

A breakdown of the number of core options[5] selected in the 100 agreements visited is shown in Table 1.

Table 1 Variation in number of options selected on visited agreement

Number of core options selected	Frequency
4	40
3	19
2	24
1	17
Total	**100**

The options were also categorised according to the broad HLS code.

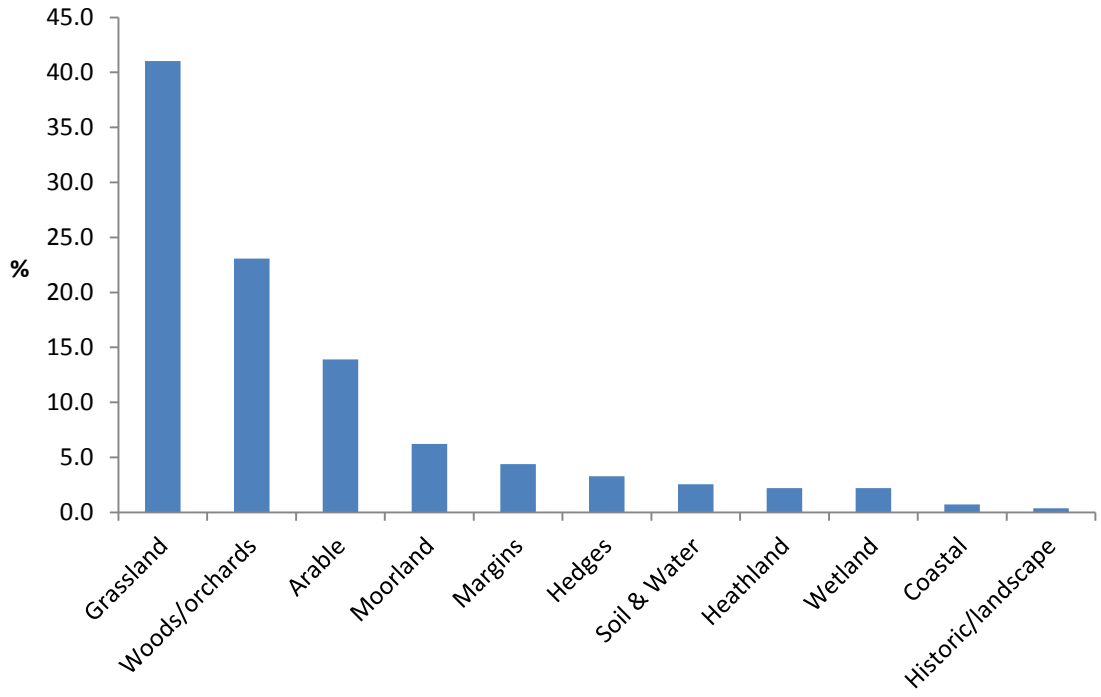


Figure 1 Option by broad habitat type

Of the 287 HLS options studied in the survey, (41%) were from the Grassland category. The other major option categories were woodland (including trees, scrub and orchards (23%), and arable land (14%)%), with moorland and rough grazing accounting for 6%.

Table 2 shows the numbers of individual options selected.

[5] i.e. main options, not supplements, more of the same or capital items, as discussed in section2.2

Table 2 Number of each option selected (where there were fewer than nine of an individual option, options have been grouped by option type[6]).

Option	Short description[7]	Number selected[8]
HB12	Hedgerow management	9
HC7	Maintenance of woodland	12
HC8	Restoration of woodland	18
HC Other	Other options for trees, woodland and scrub	33
HD7	Arable reversion	1
HE10	Floristically enhanced grass buffers	12
HF12	Enhanced wild bird seed mix	20
HF other	Other options for arable land	13
HG7	Low input spring cereal	7
HJ other	Options to protect soil and water	7
HK6	Maintenance of species-rich grassland	15
HK7	Restoration of species-rich grassland	41
HK15	Maintenance of grassland for target features	18
HK17	Creation of grassland for target features	10
HK other	Other options for grassland	31
HL10	Restoration of moorland	10
HL other	Other options for moorland and upland rough grazing	7
HN8	Educational access	1
HO other	Options for lowland heathland	6
HP other	Options for inter-tidal and coastal locations	2
HQ other	Options for wetlands	7

The distribution of the sample is shown in **Error! Reference source not found.**. All regions of England were represented though, as would be expected with a random sample, coverage was not even.

3.2 Representativeness of sample

Overall sample analysis was undertaken concerning the size of the holding. Comparative data were gathered to cover all HLS agreements signed during the same period as the sample for this survey, namely from September 2009 or earlier.

[6] except where the group was only represented by one option
[7] Not necessarily the full option title. See Appendix 3 for full list of options.
[8] This number does not match the number of each option assessed as some options, were not present on the ground when the agreement was visited (e.g. HF12 which had not been sown at the time of the visit).

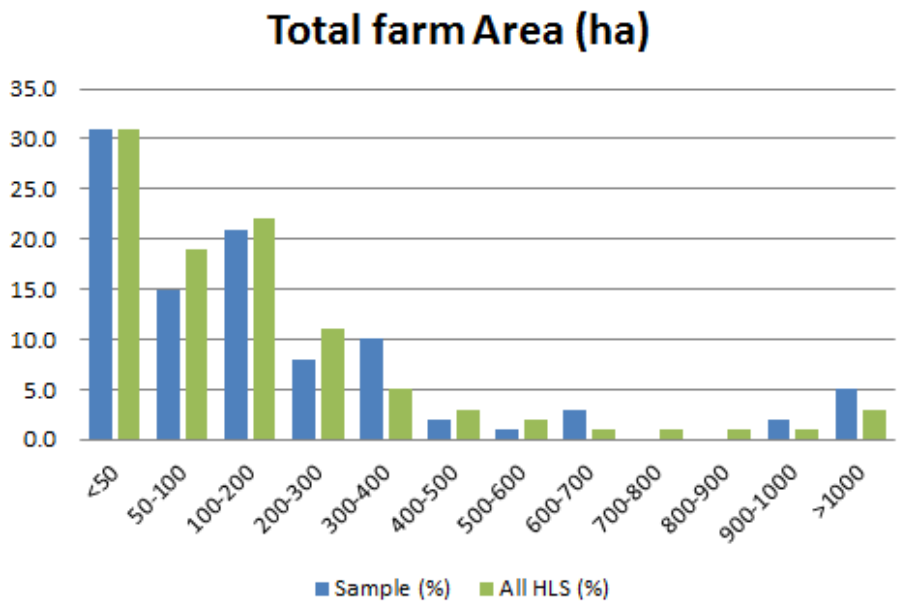


Figure 2 Total Area of Holding by Sample and Total HLS population

Figure 2 shows that just over two thirds of the farms in the sample (68%) were under 200 ha and over three quarters were under 300 ha (76%). However, there were some very large farms in the sample as well (5 were over 1,000 ha). The average holding is 221 ha, with the smallest holding 2.6 ha and the largest over 1400ha. In comparison with the total population of 3,965 HLS agreements signed during this period, the sample shows a similar spread of holding sizes, with nearly three quarters under 200 ha (72%) and 83% under 300 ha. Half of the total population of agreements were under 100 ha, compared to 46% in the sample.

3.3 Characteristics of sample

3.3.1 General characteristics

The sample reflects the farming and land owning population by being predominantly agricultural, mostly owner occupied and dependant on the farm business for their income. In terms of farm type there were few dairy farms reflecting the challenges of securing agreement with this type of farm business.

The agricultural characteristics of the agreement holders that were interviewed were determined by bringing together the responses to 5 variables: the type of business, importance of agricultural income, business plans, succession and holding size. Three categories emerged from this process, agriculture dependent, agriculture non-dependent and non-commercial.

Commercial farm businesses dominated the sample making up 80% of the agreements. However, further analysis of these farms confirms that they can be sub-divided into two categories with distinct characteristics. The larger group (65%) of commercial farm businesses (Agriculture dependent) are heavily reliant on agricultural enterprises, including AES and SPS payments, for at least half their business income. This category also had the largest average farm size and was well represented among the main conventional farming types (arable, lowland and upland beef and sheep, dairy).

The smaller category (15%) of commercial farm businesses (Agriculture non-dependent) did not rely on agriculture for the majority of their business income. These farms also tended to be smaller in size than the agriculture dependent category and also a greater proportion of businesses in the 'other' category in terms of enterprise type, suggesting they were large estates or that the farm was a small part of a larger business.

The third group is a distinctive group of agreement holders (20%) who said that their businesses were non-agricultural or operated on a non-commercial basis. The agreement holders were often environmental organisations, such as the National Trust or County Wildlife Trusts. Three-quarters of the agreement holders in this group said they obtained very little or none of their business income from agriculture and they tended to manage smaller land holdings than the two commercial farm business categories. This category tended not to be involved with conventional farming enterprises and a high proportion of agreement holders classified their land holdings in the 'other' category in terms of enterprise type.

3.3.2 Previous AES activity

The interview sought to establish the agreement holder's background experience in agri-environment scheme (AES) activity. It was anticipated that a large proportion of the sample would be made up of those leaving the classic schemes (Environmentally Sensitive Areas (ESA) and Countryside Stewardship (CSS)) and entering HLS. Of the 102 agreements in the interview sample:

- 39 joined from CSS or the Wildlife Enhancement Scheme (2) (38%)
- 20 joined from ESA agreements (20%)
- 20 were involved with ES, mostly ELS, or woodland schemes before entering HLS (20%)
- 22 had no AES experience and entered HLS directly (22%)[9].

3.3.3 Views on conservation and agriculture

Agreement holders were read a series of four statements about the link between conservation and agriculture. For each statement they had to indicate whether they agreed or disagreed with the statement. The response to this question was very similar to the responses given in Quality Assurance project (LM0433) with virtually all of the agreement holders (98%) agreeing that conservation should be an integral part of agricultural activity (Figure 3). Most (77%) disagreed that conservation is detrimental to efficient agricultural activity. Members of this group were more positive than those in LM0433 that farmers should take responsibility for the environment, with nearly a fifth (19%) strongly in agreement and over half (52%) agreeing with the statement. In LM0433, none strongly agreed and 45% agreed, with an equal number disagreeing or strongly disagreeing. Why agreement holders interviewed in LM0433 should be more positive is unclear but it may be linked with practical experience of the HLS scheme in terms of seeing change on the ground and discussing issues with NE and others. Alternatively, these might be early starters within ES and so take a more positive outlook more generally. Most (66%) agreed that AES are the most efficient way for farmers to take an interest in conservation.

[9] There is not a definitive line between the last two groups due to the staggering of start dates and the length of time that has passed since agreements were signed.

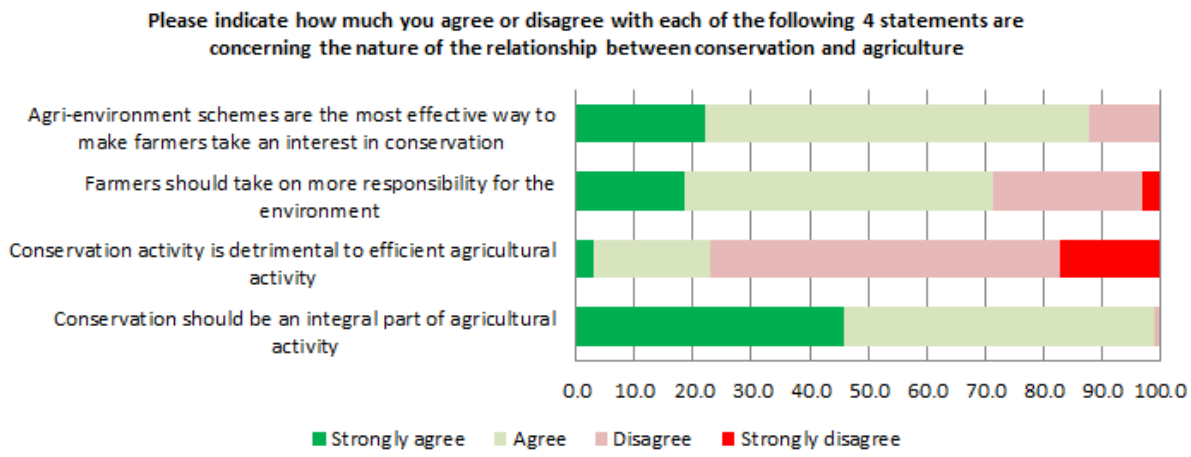


Figure 3 Views on the nature of the relationship between conservation and agriculture.

4 OVERVIEW OF OBSERVED PROGRESS TOWARDS OUTCOMES

4.1 Observed assessment of agreement set-up

4.1.1 Appropriate Option Selection

FEP codes were recorded by surveyors as one element of assessing whether a field had been allocated to an appropriate HLS option. For some options, differences between the original mapped FEP code and that recorded by our surveyors in 2014 might be expected to result from change in management following introduction of HLS. In a few cases, the FEP code listed in Part 2 of the agreement differed from that on the FEP map, implying that a NE project officer had over-ruled the classification on the FEP map. There were a few instances where this had not happened, and it appeared likely that misclassification of vegetation on the FEP map had led to an inappropriate option choice.

Some of the differences in FEP code resulted from changes in crop (e.g. arable to grassland) or change in FEP categories (e.g. removal of G03). If these are excluded, there are about 44 options out of 273, which appear to show a discrepancy between the original FEP code and the code recorded by the project surveyor. However, only about 18 of these are clearly due to a change in management between production of the FEP map and the 2014 survey. Of the remaining 26, it looks likely that some or all of a parcel was put into the wrong FEP code. It appeared that ten of these resulted in the parcel being entered into the wrong option.

4.1.2 Has an appropriate option been applied? Red/Amber/Green

Surveyors examined 273 main options on 100 agreements. ELS and 'more of the same' options were excluded from this study (as discussed in section 2.2). One parcel per agreement was assessed for each main option, with up to four options on each agreement (depending on how many were present). The surveyors were asked to judge, in each of these locations, whether an appropriate option had been applied. In making this judgement, they took into account the specific location and habitat, as they saw it in 2014, and used the information provided on the FEP map, the most recent agreement documents and any other relevant information from the dossiers, to assess what it would have been like when the agreement was set up.

If the surveyor considered the option chosen was completely inappropriate for the parcel, they assessed it as Red, for instance species-rich grassland restoration on improved grassland with no potential for restoration, or an option aimed at waders surrounded by tall trees or hedges. The option was assessed as Amber, where the surveyor considered it to be appropriate but had some reservations. For example, where only part of the parcel was suitable, for instance, or grassland for target features where the target/s were not made clear. These are sometimes difficult distinctions to make; it does rely on the experience of our surveyors to make a judgement in the context of each location. Where the surveyors were uncertain, they were advised to give the benefit of the doubt, i.e. only to use Red if an option was clearly inappropriate, only to use Amber if they had specific concerns, otherwise to record Green.

Table 3 Has an appropriate option been applied?

	No of options	% of total
Green	240	88
Amber	28	10
Red	5	2
Total	**273**	

On 74 of the 100 agreements, all the sampled options were appropriate. On 19 agreements, a maximum of one option was recorded as amber or red; on seven agreements, two options were recorded as either amber or red.

The 5 inappropriate (Red) options were on 5 different agreements. The 28 options considered appropriate but with reservations (Amber) were on 23 different agreements.

.

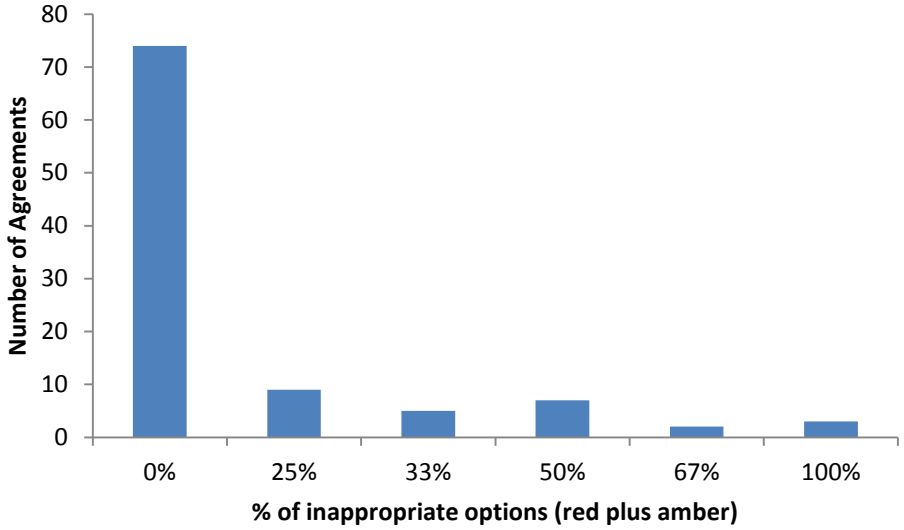


Figure 4 Distribution of inappropriate options among agreements

For nineteen agreements only one main HLS option was assessed. Two of the three agreements in the 100% inappropriate category only had one main option, the fact that it was considered in some way inappropriate, clearly has serious implications for these agreements.

Table 4 RAG scores for appropriateness of option for each FEP code, by option type.

Habitat type	Red	Amber	Green	Total	*% red + amber*
Grassland	2	18	92	112	*18*
Margins/buffers		2	10	12	*17*
Heathland	1		5	6	*17*
Moorland	1	1	15	17	*12*
Arable		4	34	38	*11*
Woods/orchards	1	3	59	63	*6*
Hedges			9	9	*0*
Historic/landscape			1	1	*0*
Soil & Water			7	7	*0*
Coastal			2	2	*0*
Wetland			6	6	*0*
Total	**5**	**28**	**240**	**273**	***12***

In general, the percentage of options considered to be clearly inappropriate (red) was very low, though slightly more were classified as a cause for concern (amber). As numbers were small for most habitats it is difficult to draw firm conclusions, but the greatest concerns over the appropriateness of the options occurred in grassland options. For grassland, the sample size was considerably larger than other habitats, implying that the estimate of 18% of doubtful appropriateness or inappropriate designation was more likely to be robust. In contrast, for woodland and orchards, where there was also a reasonable sample size, only 6% were considered to be amber.

When considered on an option basis, once again, sample size limits the inferences that can be drawn. As can been seen in Table 5, the option with the highest number of occurrences deemed to be inappropriate by the field surveyor was HK7 (restoration of species-rich grassland). For these nine grasslands the reasons for classification as red and amber can be split into three distinct groups (one HK7 fell into two groups). In six instances the surveyor felt the option was too ambitious, in three instances the option was applied over a large area with HK7 only being suitable on a small proportion of this, and on one occasion the surveyor thought maintenance would have been more appropriate. In this latter case, the FEP map showed the parcel as G06 condition C, whereas our surveyor recorded G07 condition B (noting an abundance of *Juncus acutiflorus*, *Angelica sylvestris*, and *Eupatorium cannabinum*); this error in assessing the vegetation may have led to the choice of restoration rather than maintenance.

One HK7 (restoration of species-rich grassland) was assessed as inappropriate (Red) because it was considered to be 'improved grassland' when the FEP map was produced before the agreement was set-up, and was still classed as such in 2014 (using the definition from the FEP handbook), with no signs of potential for restoration to species-rich grassland. The surveyor commented "Not appropriate as field contains nothing other than improved

grassland, with no high-value indicator species present, a dominant grass sward and no genuine potential to become species-rich unimproved grassland."

Table 5 Option Selection: The number of FEP codes in each HLS option with at least one red or amber score (see Appendix 2 for full table)

Option	Short description[10]	Red	Amber	Green	Total	*% inappropriate (red+amber)*
HL10	Moorland restoration	1		30	31	*3*
HF12	Wild bird seed mix		1	17	18	*6*
HK15	Grassland maintenance		3	26	29	*10*
HK16	Grassland restoration*		1	9	10	*10*
HC8	Woodland restoration*	1	1	16	18	*11*
HK6	Preventing grassland erosion		3	22	25	*12*
HG7	Low-input spring cereal		1	6	7	*14*
HE10	Floristically enhanced buffer		2	10	12	*17*
HK7	Sp rich grassland restoration	1	8	39	48	*19*
HK8	Sp rich grassland creation		1	4	5	*20*
HK17	Grassland creation*		2	7	9	*22*
HK9	Wet grassland maintenance**	1	1	6	8	*25*
HF20	Arable plant areas		2	5	7	*29*
HK10	Wet grassland maintenance***		3	5	8	*38*
HC13	Parkland restoration		1	1	2	*50*
HC9	Woodland creation in SDA		1		1	*100*
HL8	Restoration of rough grazing		2		2	*100*
HO4	Lowland heathland creation	1			1	*100*
Total		**5**	**33**	**315**	**353**	***11***

*for target features; **for breeding waders; ***for wintering waders and wildfowl

Several of the red/amber scores for grassland and woodland reflected doubts as to whether they were in the right category amongst restoration/maintenance/creation, e.g. woodland under a creation option where there were already a lot of trees present. In other cases, the option had not been put in a suitable location, e.g. field margins in very wet areas, fallow plots in areas with bad weed problems, wet grassland for birds on areas that were too dry or next to tall trees. Some grassland restoration options were highlighted because they were wholly or partially improved or semi-improved and it was thought unlikely that the prescribed management would achieve BAP[11] habitat quality. There were ten instances where an inappropriate option may have resulted from an inaccurate FEP map, e.g. species-rich G07 grassland mapped as M01 and put in HL10 moorland restoration. The objectives of grassland for target features (HK15/16/17) options were sometimes unclear, so the option was categorized as 'amber' for this reason.

[10] See Appendix 3 for full names of options
[11] Biodiversity Action Plan

4.1.3 Indicators of Success

In the Part 3 documentation for each agreement, each HLS option lists a number of IoS and MPs. Each HLS option may apply to one or more parcels. Generally one list of IoS apply to all the parcels in the option, but in some agreements the IoS are labelled to show which parcels they apply to; this is very helpful, especially where they are identified by RLR numbers (usually shown on the Agreement map in Part 7) rather than place/field names which may be known to the AH, but not to our surveyors or new NE staff.

There were 317 options with IoS in the 270 fields/parcels which were surveyed on 100 agreements; this includes some supplement options such as Hay making (HK18) which often have their own IoS in addition to those of the main HLS options There are therefore more options in this analysis than in that of the appropriate option in section 4.1.2 where each parcel was considered as a whole, and any with multiple options were considered as a group.

There were a few options where there were no easily identifiable IoS. In some cases, this was because a pre-existing management plan had been used as the basis for the Part 3 document which did not specify IoS. In other cases there was a reference to the need to produce a management plan which would specify IoS, but although this was scheduled to be produced in 2014, the Part 3 document had not been updated with this information.

1279 IoS were considered in all, with a further 184 that could not be assessed for the reasons given in Table 6:

Table 6 Reasons that Indicators of Success could not be assessed

Type of IoS	Number	Reason
SOIL	63	IoS referring to soil pH and phosphate levels were not assessed as soil testing was beyond the remit of this project
SSSI	45	IoS referring to SSSI condition were not assessed as consideration of SSSI condition criteria was not part of this project
SUPP	16	IoS for supplementary options which simply stated that the IoS were the same as for the main HLS option(s) were not included
NA	51	Some IoS didn't apply to the parcel surveyed e.g. they referred to a historic feature or a particular habitat like an upland flush which did not occur in the parcel selected for assessment. In some cases (about half), this is made explicit in IoS which give particular RLR numbers, more often it is not made clear so the surveyor has had to make a judgement.
NO INFO	9	Some other IoS refer to information which was not provided in the dossiers, such as management plans or farm-scale information which could not be collected e.g. numbers of pedigree rare breed stock.

4.1.3.1 Type

1279 IoS were assessed for appropriateness. The surveyors used a RAG score (Red/Amber/Green) to score whether they thought each IoS was of an appropriate type for

the selected option, in the specific location. Only 3% of assessed IoS were considered to be of an inappropriate type (red); concern was expressed about a further 7% (amber).

Table 7 Is the IoS an appropriate type?[12]

	No. of IoS	%
Inappropriate (Red)	37	3
Doubtful (Amber)	87	7
Appropriate (Green)	1155	90
Total	**1279**	

All IoS were considered appropriate on 43 agreements; the following plot shows the distribution of those considered inappropriate or doubtful.

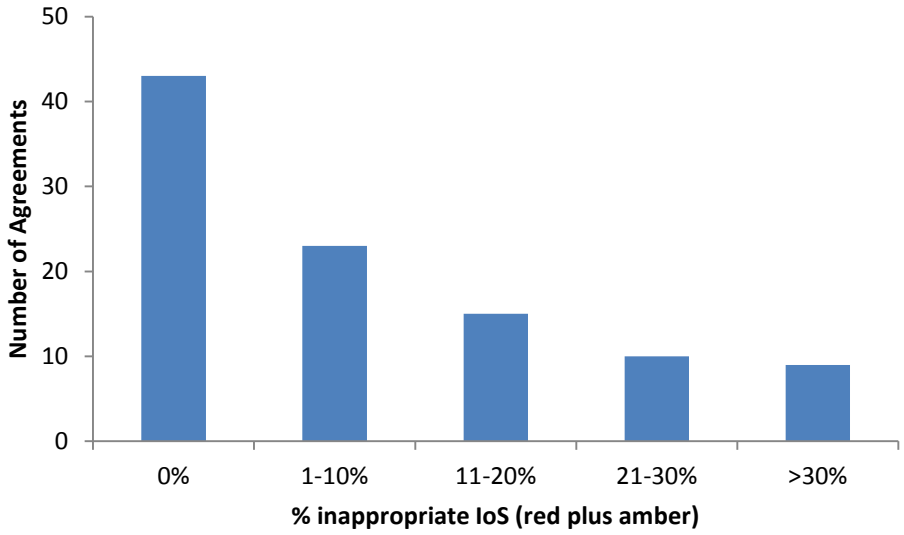


Figure 5 Distribution of inappropriate IoS types across agreements

[12] Red was used when the IoS was judged by the surveyor to be an inappropriate type, Amber was used where the type was deemed to be of questionable suitability. See section 2.4.

Table 8 IoS types frequently recorded as an inappropriate type (see Appendix 1 for full list)

IoS types	Red	Amber	Green	Total	% inapp
target species	1	4	10	15	33
vegetation height		1	2	3	33
flowering	3	13	44	60	27
ride/glades/firebreaks	3	1	13	17	24
grazing regime	1	4	26	31	16
positive indicators	9	19	161	189	15
disturbance	3		18	21	14
vegetation cover	3	1	26	30	13
wildflower cover		5	37	42	12
habitat extent	3	1	34	38	11
invertebrates		1	9	10	10
veg structure	5	13	185	203	9

IoS which referred to vegetation structure, e.g. proportion of tall versus short plants in grassland, were mostly thought to be appropriate (91%); the difficulties arose mostly in upland areas, where IoS referred to the cover or age structure of heather, when there was little or none present.

IoS which referred to lists of positive indicators were thought to be appropriate in 85% of cases, but sometimes it was not clear which list of indicators should be used as none was provided in the part 3 document (e.g. for G03 which is not in FEP handbook, or for 'desirable broadleaves' which were not defined). In other cases, where few if any of the positive indicators were present, the list was thought to be inappropriate (possibly because of the wrong FEP code) or because it was too ambitious given the type of management. IoS which referred to change, for instance, '*Species such as ox eye daisy, common vetch and self heal should increase in frequency'*, were inappropriate, because no baseline information was provided.

There was less problem with IoS which referred to negative indicators, like weedy and invasive species; only 3% of these were considered inappropriate, for example use of vague terminology such as *'Undesirable woody species should not exceed 10% of woody cover*' and *'non-native species should not exceed 5% of woody cover*' applied to a poplar plantation.

IoS referring to flowering, such as '*At least 40% of wild flowers should be flowering during May-June*', were recorded as inappropriate in 27% of occurrences, because they were open to interpretation and difficult to assess. No definition is given for 'wild flowers', (should *Ranunculus repens* and *Trifolium repens* be excluded as in some FEP definitions?) and it is not clear whether it should be 40% by area or 40% of plants, neither of which is easy to estimate. It would be simpler to estimate what proportion of the area has been cut or grazed off.

IoS referring to habitat extent also caused problems, e.g. '*The extent of the habitats of interest within the grassland as identified in the Farm Environment Plan should be maintained or increased*'. For most agreements, the FEP map was not sufficiently detailed to use for detecting change in vegetation type, especially where there was a mosaic or patches of scrub or wet areas. In addition, it was not always obvious which were the '*habitats of interest*' which were permitted to increase and which were those not of interest whose decline was acceptable. This is an example of a standard IoS being copied from templates without sufficient thought as to the best way of applying it, in a particular location.

IoS referring to grazing regime were generally appropriate (84%), but some were too vague, e.g.' *The grassland to be managed under this option should be maintained under an extensively managed grazing regime'*. Others were simply not applicable, for instance '*Between February and April, no more than 50% of Heather shoots should show evidence of grazing during the previous year*', applied to parcels with no heather.

In woodlands, IoS which referred to rides and glades were sometimes inappropriate e.g. '*a network of rides and open ground should cover between 10% and 30% of the area*', applied to small parcels or steep land.

IoS referring to disturbance were sometimes also rather vague, e.g. '*There should be no evidence of ground disturbance following establishment of the sward*', others referred to disturbance of *Sphagnum,* or rocks and scree, when there was none present.

IoS concerning target species regularly failed to provide necessary information, eg. '*in all years, populations of nationally rare / locally significant species should be maintained*'. This again was impossible for our surveyors or AHs to assess, since no indication of which species, nor baseline figures, nor methodology were provided. It needs to be made clear for these target species, who is to monitor them and how often, especially where they require specialist knowledge, e.g. '*key spp of heathland invertebrates found at least every 5 years';* 'key species' needs to be defined in context of this site, and methodology and acceptable thresholds need to be specified. This may be easier for birds, e.g. '*the following bird species: corn bunting & yellow hammer should be seen regularly using this area* ' but 'regularly' needs to be defined and this IoS will only be useful if a proficient recorder is able to make repeated visits using an acceptable methodology; if the AH is expected to collect this information then this should be made clear, and training and recording forms provided.

4.1.3.2 Level

The surveyors scored the level at which each IoS was set, by considering whether it was appropriate given the option objectives, and whether it was realistic at the specific location, or whether it was ambitious enough, if it had been achieved. Five percent of the assessed IoS were thought to be at an inappropriate level, with a further 19% causing concern.

Table 9 Is IoS set at an appropriate level[13]?

	No. of IoS	%
Inappropriate (Red)	62	5
Doubtful (Amber)	241	19
Appropriate (Green)	976	76
Total	**1279**	

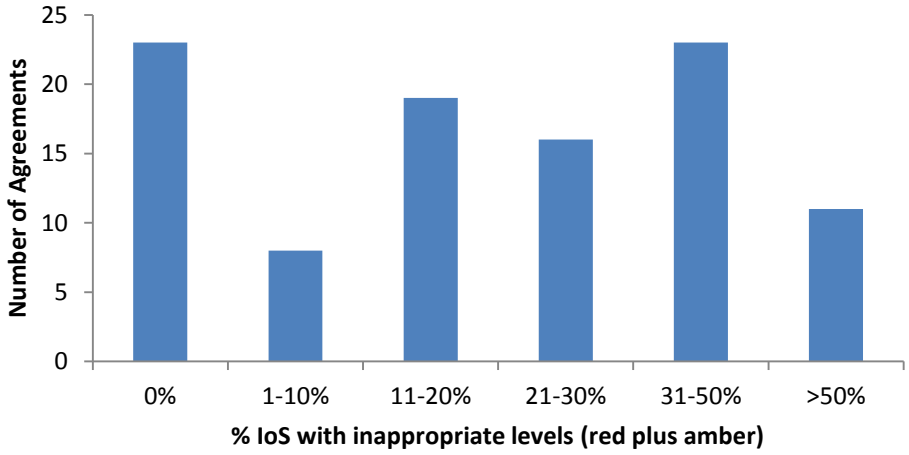


Figure 6 Distribution of inappropriate IoS levels across agreements

IoS levels for target species were often flagged as inappropriate because they were left vague or were expressed in terms of change without providing baseline information; this was also the case for habitat extent. Areas specified for rides, glades and firebreaks often failed to take account of the size or shape of the parcel. Wildflower covers were often over-ambitious. Flowering and positive indicators were not always clearly defined and sometimes unrealistic.

More concerns were recorded with the level at which IoS were set than their type. There was a highly significant relationship between the scores given for type and level (chi-sq=530, $p<0.001$), with more than 80% of IoS being allocated to the same category (Red/Amber/Green) for type and level.

[13] Red was used when the IoS was judged by the surveyor to be set at an inappropriate level. Amber was used where the level was deemed to be questionable. See section 2.4.

Table 10 Types of IoS with inappropriate levels (see Appendix 2 Table 33 for full table)

IoS types	Red	Amber	Green	Total	% inapp
target species	3	5	7	15	53
ride/glades/firebreaks	4	4	9	17	47
wildflower cover	4	15	23	42	45
invertebrates		4	6	10	40
flowering	7	17	36	60	40
habitat extent	3	12	23	38	39
positive indicators	17	51	121	189	36
structure	9	45	149	203	27
grazing regime	2	6	23	31	26
moist soil		5	15	20	25
sward height		4	13	17	24
birds	3	15	66	84	21
hedge management		3	14	17	18
water levels		2	10	12	17
vegetation cover	2	3	25	30	17
arch/historic	1	9	52	62	16
negative indicators	2	16	100	118	15
bare ground	1	12	76	89	15
tree management	1	2	21	24	13
seeding	1	3	36	40	10
disturbance	2		19	21	10

Table 11 Relationship between type and level of IoS

		Appropriate Level				
		Red	**Amber**	**Green**	**Total**	**%**
Appropriate Type	Red	27	6	4	**37**	3
	Amber	5	61	21	**87**	7
	Green	30	174	951	**1155**	90
	Total	**62**	**241**	**976**	**1279**	
	% overall total (1279)	5	19	76		

4.1.4 Management Prescriptions

33 MPs were excluded because they referred to capital items or management plans which are considered elsewhere, but more frequently because they referred (explicitly or implicitly) to different parcels in the same option, but didn't apply to the parcel which was surveyed.

2754 management prescriptions were assessed, for 322 options from 271 fields/parcels in 100 agreements. This includes supplements (eg. HR1 grazing supplement for cattle), which often have their own MPs, in addition to those for the main options. There are a few options which have MPs but no IoS so there are more options in this analysis than in that of the IoS above.

Only 3% of MPs were considered inappropriate. Surveyors were given the option of scoring their response as Yes, No or Can't Assess.

Table 12 Is the MP appropriate?

	No. of MPs	%
No	72	3
Yes	2682	97
Total	**2754**	

58 agreements (out of total of 100) had no inappropriate MPs, and only seven agreements had more than 10%.

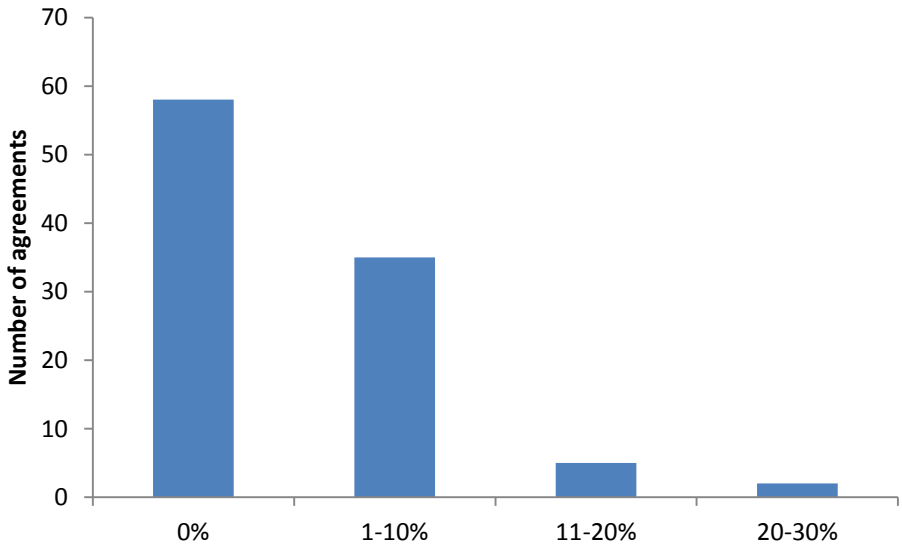


Figure 7 Percentage of inappropriate Management Prescriptions

The reasons given for the 72 MPs scored as 'not appropriate' were variable but most reflected that the MP was irrelevant to the particular parcel rather than that it was actually wrong.

Table 13 Appropriateness of MPs by MP type

MP type	No	Yes	Total	% inapp
Butterfly habitat	1	5	6	17
Ride/glade in woodland	3	22	25	12
Disturbance[14]	5	62	67	7
Pond management	1	16	17	6
Margin	1	19	20	5
Grazing	27	530	557	5
Bird habitat	1	24	25	4
Archaeology /historic	3	77	80	4
Tree management	5	140	145	3
Cultivation	6	200	206	3
Hedge management	1	35	36	3
Sowing	3	119	122	2
Cutting	2	99	101	2
Topping	1	64	65	2
Soil inputs	5	385	390	1
Drainage	2	181	183	1
Control weeds/pests	3	319	322	1
Bonfires		12	12	0
Boundary		21	21	0
Chemicals		90	90	0
Ditch management		54	54	0
Fallow		7	7	0
Fen management		15	15	0
Harrowing etc		10	10	0
Harvesting		7	7	0
Hay management		56	56	0
Heath management		7	7	0
Management plans		62	62	0
Scrub control		35	35	0
Tipping		2	2	0
Total	**72**	**2675**	**2747**	**3**

Irrelevant MPs were commonly encountered in woodland options, for example, '*Supplementary feeding is not permitted'* in woodlands where livestock were excluded, '*There must be no ploughing or other cultivation, reseeding, rolling or chain harrowing*' in

[14] disturbance of rock/scree/seaweed or by machinery e.g. vehicles – where inappropriate it is probably because the feature (rock/scree) wasn't present.

woodlands or grasslands where it wouldn't be feasible, e.g. on steep ground, and '*Do not remove or disturb rock or scree'* in parcels where there wasn't any. These may be mandatory MPs which Project Officers are required to include, but they contribute to the impression that the management prescriptions are not specific to the option parcels and may therefore mean that the AHs gets the impression that it is a general prescription rather than one specific to their land.

Some MPs were scored as 'not appropriate' because they were too vague to be useful, such as '*To benefit Great Crested Newts, the owned land within a 200m radius of a breeding pond must be managed extensively'*. It may be clear to NE advisers what this implies, but it needs to be spelled out for the AHs.

There are a few cases where a MP was unhelpful, for example, a grassland (HK15) where *'supplementary feeding must be confined to the northern end of the existing avenue'*; this was to protect the site of a medieval village which occupied about a quarter of a large field but the designated feeding site at the northern end of an avenue of trees was causing severe poaching immediately adjacent to the church yard and landscape feature, and next to a footpath, when there were plenty of alternatives. Another example was advice to '*Leave hedges to grow untrimmed with a view to managing under a long-term laying or coppicing rotation*', where the surveyor commented "Has not been managed for so long that it is almost exceeding 5 m maximum width for hedge. Unlikely that hedge laying/coppicing will occur as no capital money for it so unlikely AH will do it"

There were other situations where the surveyor felt the MP was impractical, for instance a woodland (HC7) where the AH was instructed to '*Graze lightly with cattle. Manage stock to avoid poaching and damage to trees and the field layer*', and the surveyor thought that cattle were likely to do more harm than good.

The relationships between MP appropriateness and options are given in Appendix 2.

4.2 Observed progress towards Agreement Outcomes

4.2.1 Progress towards achieving Indicators of Success

The field surveyors were asked to make a judgement as to whether each IoS had been achieved, or was likely to be achieved within the agreement time-frame.

Achievement could not be assessed for 15% of IoS, either because the surveyor was present at the wrong time (e.g. IoS for earlier years or winter months), or because an assessment would require more than one visit (e.g. requirement for birds to be regularly seen), or because the IoS referred to change but did not provide a suitable baseline.

IoS which cannot be assessed by a single visit may be of limited usefulness for monitoring unless the AH or a local expert (botanist, ornithologist etc) can be found who is willing to undertake repeated visits. In some cases, our surveyors did use their experience to make an assessment but this may have been more likely where the situation was clearly achieved or not achieved; it may be that borderline cases were more likely to be recorded as 'Cant Assess'.

61% of IoS assessed were thought to have been achieved, with a further 18% on target, whilst 21% were thought unlikely to be achieved by the end of the agreement.

Table 14 Have the IoS been achieved?

	No. of IoS	%
Already achieved	661	61
On target	200	18
Unlikely to be achieved	223	21
Total	**1084**	

Not surprisingly, there is a highly significant relationship between the appropriateness of IoS type and their achievement (chi-sq = 95, p<0.001), i.e. IoS thought inappropriate were less likely to be achieved. 83% of IoS, whose type was categorised as green, were on target or had been achieved, as opposed to 57% of those in amber and 26% of those in red.

Table 15 Relationship between IoS achievement and appropriate IoS type

IoS Achievement	Appropriate type				
	Red	**Amber**	**Green**	**Total**	%
Not on target	26	33	164	**223**	21
On target	3	14	183	**200**	18
Achieved	6	30	625	**661**	61
Total	**35**	**77**	**972**	**1084**	
%	3	7	90		

The relationship between an appropriate target level for the IoS and achievement is also highly significant (chi-sq= 174, p<0.001), i.e. IoS with inappropriate target levels were less likely to be achieved. 87% of IoS whose target level was categorised as green were on target or had been achieved, as opposed to 63% of those in amber and 23% of those in red.

Table 16 Relationship between IoS achievement and appropriate IoS level

IoS achievement	Appropriate level				
	Red	**Amber**	**Green**	**Total**	%
Not on target	40	73	110	**223**	21
On target	2	46	152	**200**	18
Achieved	10	79	572	**661**	61
Total	**52**	**198**	**834**	**1084**	
%	5	18	77		

Assessment of IoS achievement varied between option types but sample sizes are small other than for grasslands and woodlands. In this sample, Hedges, Soil & Water and Wetland

options look most successful, while Arable and Margins caused more concern. However, since many of the Arable options are established every year or two, lack of success in one year does not mean they have not been beneficial over the full period of the agreement; also many of them were Wild Bird Seed options which could not be properly assessed during the summer survey period. The floristically enhanced grass margins (HE10) mostly failed on insufficient desirable or sown species, which may have been better earlier in the agreement.

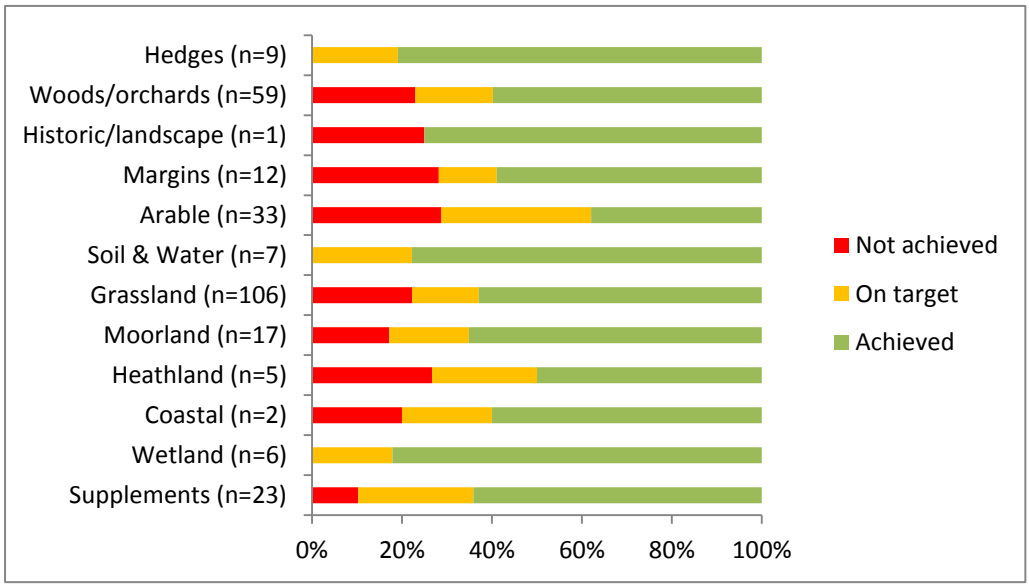


Figure 8 Percentage achievement for Indicators of Success by option types (note low sample sizes for some types)

(n=number of agreements on which this option type was evaluated). See Appendix 2,

Table 34 for IoS achievement by individual options.

Assessments of achievement were made for 98 agreements; on 30% of these (29), all IoS for which surveyors made an assessment, were achieved or on target. The number of agreements with IoS not on target, are shown in Figure 9 below.

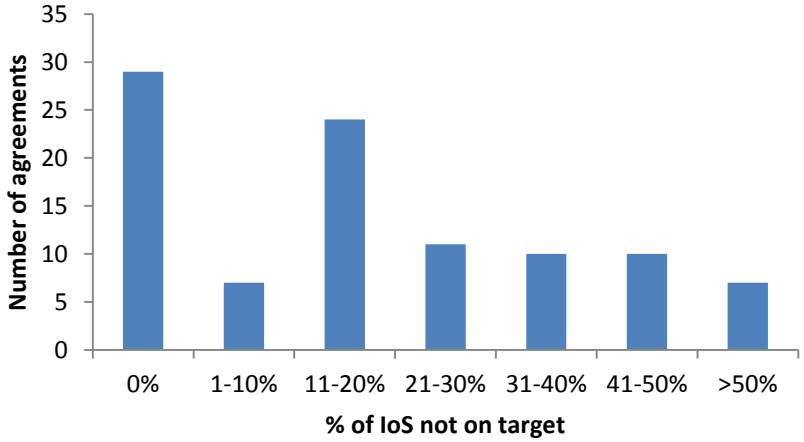


Figure 9 Frequency of agreements with IoS not on target

Table 17 Achievement of IoS types

IoS types	Not on target	On target	Achieved	Assessed	% not on target
structure	44	34	120	198	22
positive indicator spp	68	42	65	175	39
negative indicator spp	14	17	82	113	12
bare ground	7	17	61	85	8
flowering	17	8	25	50	34
arch/historic	1	5	42	48	2
scrub control	2	2	41	45	4
wildflower cover	9	7	25	41	22
birds	9	15	16	40	23
vegetation cover	9	4	16	29	31
habitat extent	7	1	18	26	27
seeding	4	9	11	24	17
tree management	5	3	14	22	23
disturbance	4	1	15	20	20
grazing regime	4		14	18	22
ride/glades/firebreaks	5	4	7	16	31
bracken control	2	4	8	14	14
hedge management	1	2	11	14	7
erosion		1	12	13	0
moist soil	1	2	9	12	8
standing water	2	1	8	11	18
sward height		3	7	10	0

IoS types	Not on target	On target	Achieved	Assessed	% not on target
water levels	2	3	5	10	20
burning		4	4	8	0
target species	3	2	3	8	38
cereal density	2	2	1	5	40
field size	1		3	4	25
surface features			4	4	0
invertebrates		1	2	3	0
reed cover/height			3	3	0
stock exclusion		1	2	3	0
tree establishment		3		3	0
vegetation height		1	2	3	0
open water			2	2	0
litter			1	1	0
poaching/compaction			1	1	0
pollution			1	1	0
Total	**223**	**199**	**661**	**1083**	**21**

'Positive indicator spp' was a common IoS type which was not achieved; there were usually some indicator spp present but not always enough and not at high enough frequencies. In a few cases this was because the list was inappropriate, due to the wrong FEP code or a failure to take account of the species present at the start of the agreement, but more often it was because the target was ambitious and the management prescribed lacked sufficient intervention to achieve the desired change within the period prescribed.

A diverse structure was also frequently hard to achieve, whether in terms of different age brackets for heather or scrub, or mosaics of short and tall grasses. There was often a failure to leave flowers and grasses to seed, especially where this required different management for different parts of a parcel. Failure to control negative indicators was often a problem, both for weeds like thistles, invasive species like Himalayan Balsam, as well as bracken, bramble and scrub. Sown species and desirable broadleaves often did not meet the cover required in arable options, nor wildflowers in grasslands.

Table 18 Reasons for failure to achieve IoS

Reasons	Count of ios	% of total
MPs not followed	91	41%
Bad fit for parcel	44	20%
Level too high	32	14%
Unrealistic in timescale	22	10%
Wild Bird Seed Mix estimate	12	5%
Inappropriate option	6	3%
Unclear	5	2%
Conflicting IoS/MPs	4	2%
MPs not achieving IoS	4	2%
Wrong FEP code	3	1%

Total	**223**

It is often difficult to identify a single reason for lack of IoS achievement; there may be a variety of factors which make a particular option or site difficult to manage, but a simplified breakdown is presented above to indicate the main reasons for failure to meet IoS.

Failure to follow management prescriptions accounted for about 40% of IoS which were not likely to be achieved. These included both a lack of management e.g. no tree planting or weed control, and management which contravened the MPs, e.g. overgrazing, wrong type of stock, wrong cutting date. In other cases management was carried out but not followed up, e.g. trees were planted but not looked after or replaced if they died; scrub or weed control was done once but not repeated; seed mix was sown in margins or buffer strips but not cut frequently enough to prevent weed competition or resown if the seed mix failed. Such cases illustrate a need for more commitment over the full ten years of the agreement. Greater support over the full agreement by NE staff would help to retain such commitment.

IoS which were a 'bad fit' for the surveyed parcel were the next largest category (20%); these include IoS for features which were not present, e.g. heather or Sphagnum, and IoS which were inappropriate for a particular parcel, e.g. a woodland glade on a steep slope.

IoS where the level was set too high accounted for about 14% of failures, for example expectation of a high frequency of plant species indicators for e.g. lowland meadows[15], where there were few or none at the start and no re-seeding or green hay spreading was prescribed. Another 10% of failures occurred where the target level was thought to be achievable but not within the timescale of the agreement e.g. unrealistic canopy cover for new tree planting.

The IoS for wild bird seed mix options are mostly concerned with vegetation cover at full establishment, a point which had not been reached at the time of survey, but some surveyors estimated whether they thought the targets were likely to be met.

The other reasons only occurred infrequently but included inappropriate IoS resulting from the wrong FEP code or option; insufficient information on location or baseline; conflict between IOS and MPs, e.g. a field margin with IoS for both barn owl and blackthorn for hairstreak butterflies, and lack of clarity.

4.2.2 Implementation of Management Prescriptions

Surveyors were asked to assess whether the management prescriptions were being followed; this was not possible for 37% of MPs where more than one visit would be required, or one at a different time of year, or where the MP concerned management that could not be readily detected e.g. use of pesticides. For those MPs where surveyors did make a judgement, it was thought that 89% were being followed.

Table 19 Implementation of MPs

	No. of MPs	%

[15] FEP code G06

Cannot Assess	1010	37
Not being followed	192	7
Being followed	1552	56
Total	**2754**	

Implementation of MPs is quite variable between agreements, with 30 of the 100 agreements following all the MPs which could be assessed, while for 16 agreements, more than 20% of the MPs assessed were not being followed.

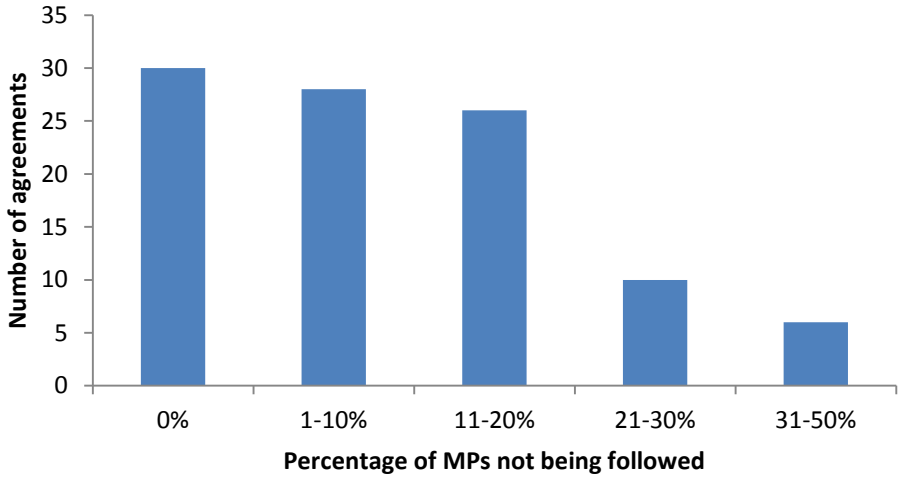


Figure 10 Frequency of agreements with MPs not being followed

The relationship between implementation and the appropriateness of MPs is highly significant (chi-sq=58, p<0.001), so farmers were less likely to follow MPs which surveyors thought inappropriate. Ten percent of the MPs that surveyors thought were appropriate were not being followed, compared with 43% of MPs deemed inappropriate. In some cases, this was because the MP was impractical, for example a requirement to mow or graze with cattle on land that is too steep, in others the feature was simply not present in the parcel.

Table 20 Relationship between appropriateness of MPs and implementation

MPs followed	MP appropriate		Total	%
	No	Yes		
No	23	169	192	11
Yes	30	1522	1552	89
Total	**53**	**1691**	**1744**	
%	**3**	**97**		

There was not much variation in the rate of implementation of MPs between different option types. Margins (Floristically enhanced grass buffers HE10) showed one of the highest rates of non-compliance, which ties in with their relatively low IoS achievement rate, but Soil and Water options which scored well on achievement of IoS had also had relatively high numbers of MPs not being followed. Hedges however scored well for both MP compliance and IoS achievement, perhaps because they are relatively straight-forward to implement.

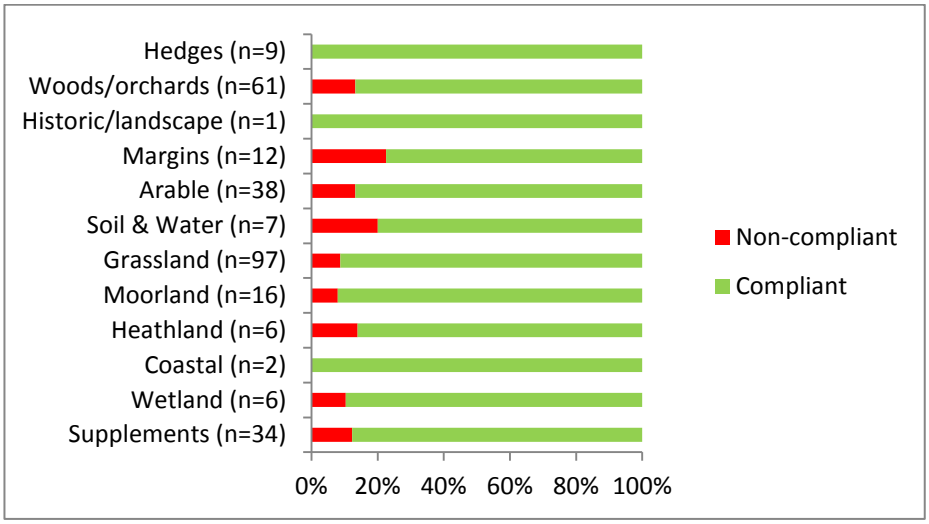


Figure 11 Percentage of MPs being followed by option type

The 97 parcels where grassland options (HK) were surveyed have been analysed in more detail, but Figure 12 shows that there is relatively little variation between the grassland options in compliance with MPs.

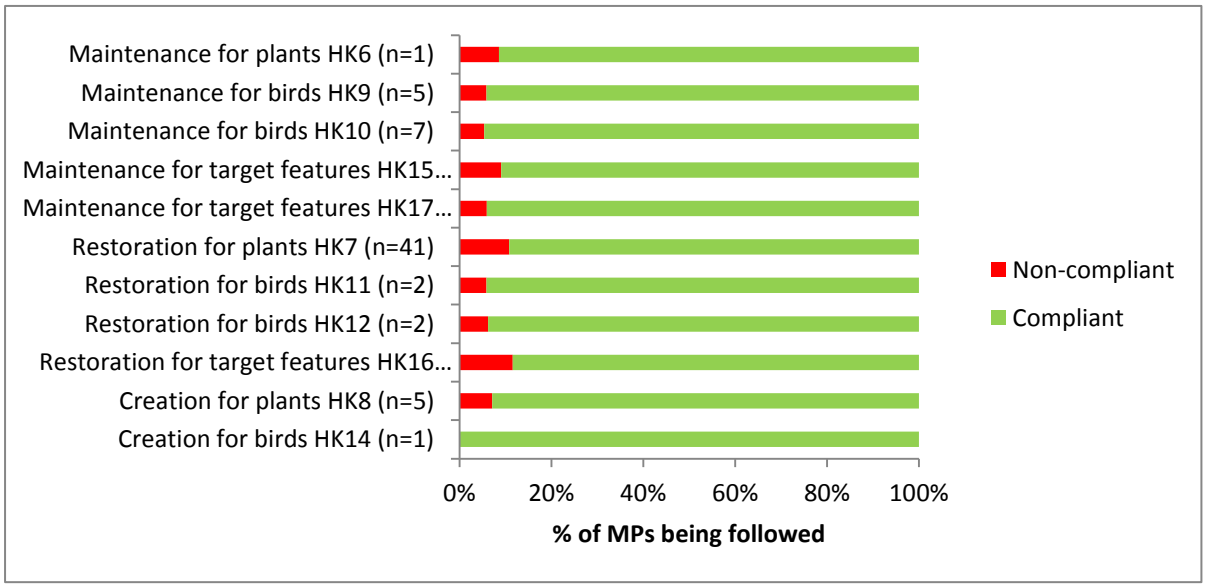


Figure 12 Percentage of MPs being followed on Grassland Options

Grouping the options according to the type of management (Maintenance, Restoration and Creation) or type of species (bird, plant or archaeology) did not show any clear association with compliance level.

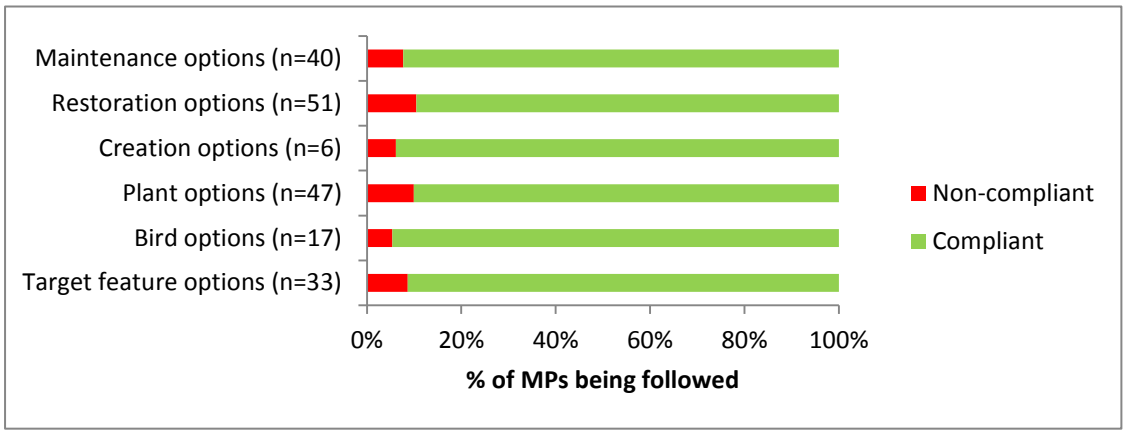


Figure 13 Percentage of MPs being followed on Grassland target groups

In order to investigate whether particular types of management activity are less likely to be adequately implemented, we have grouped the management prescriptions into activity types. On average 11% of MPs were not followed; MP types with a reasonable sample size which were not implemented included more often than average those referring to grazing, 'control', grazing, scrub and cutting. In contrast, all assessed MPs relating to bird habitat, bonfires, ditch and hedge management were being followed.

Table 21 Implementation of different types of management prescription

MP type	Not followed	Followed	Total	% not being followed
Bird	0	14	14	0
Bonfires	0	10	10	0
Ditch	0	18	18	0
Harrowing etc	0	7	7	0
Hedge	0	20	20	0
Tipping	0	2	2	0
Cultivation	2	165	167	1
Disturbance	1	57	58	2
Chemicals	1	38	39	3
Drainage	5	132	137	4
Soil	12	241	253	5
Arch/hist	4	62	66	6
Boundary	1	12	13	8
Hay	1	11	12	8
Pond	1	11	12	8
Topping	4	34	38	11
Tree	12	94	106	11

MP type	Not followed	Followed	Total	% not being followed
Mgmt plan	3	21	24	13
Ride/glade	2	14	16	13
Margin	3	16	19	16
Fallow	1	5	6	17
Fen	1	5	6	17
Grazing	51	249	300	17
Control	42	192	234	18
Harvesting	1	4	5	20
Sowing	17	59	76	22
Scrub	7	20	27	26
Cutting	16	30	46	35
Heath	2	3	5	40
Butterflies	1	1	2	50
Total	**191**	**1547**	**1738**	**11**

Looking at this information in more detail (Appendix 1 Table 37) suggests that MPs relating to bracken control, tree establishment and ditch bank management were more frequently not being followed compared to other MPs, though sample sizes were low and so inferences should be made with caution.

There was a statistically significant relationship between the percentage of IoS achieved and the percentage of MPs followed (R^2 = 0.05; P=0.032; Figure 14). In 8% of cases however, all management prescriptions were being followed but not all IoS were being achieved. In such cases, the IoS may not have been set appropriately or the MPs may have been inadequate. In other cases, all IoS were being achieved despite all MPs not being followed. In many of these cases, this is likely to be because some of the MPs were irrelevant in the context of the parcel being assessed.

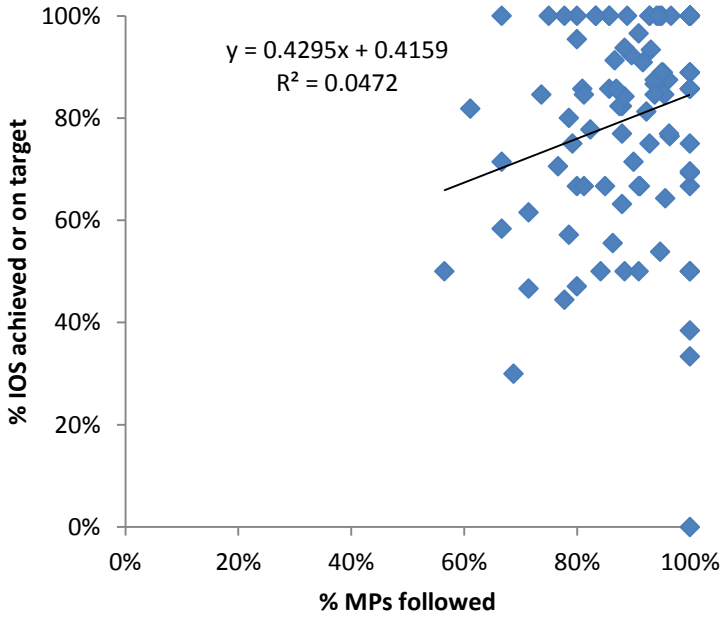


Figure 14 Relationship between achievement of IoS and MP compliance

A further analysis was carried out in which instances where either IoS achievement or MP implementation was 100%, but not both, were excluded, in order to reduce the probability of inappropriate setting of IoS or MPs influencing the outcome. In this case, the relationship was very highly significant (R^2 = 0.38, P<0.001; Figure 15). This suggests that where IoS were not fully achieved and MPs were not fully followed, there was a causal relationship between MP implemetation and outcome.

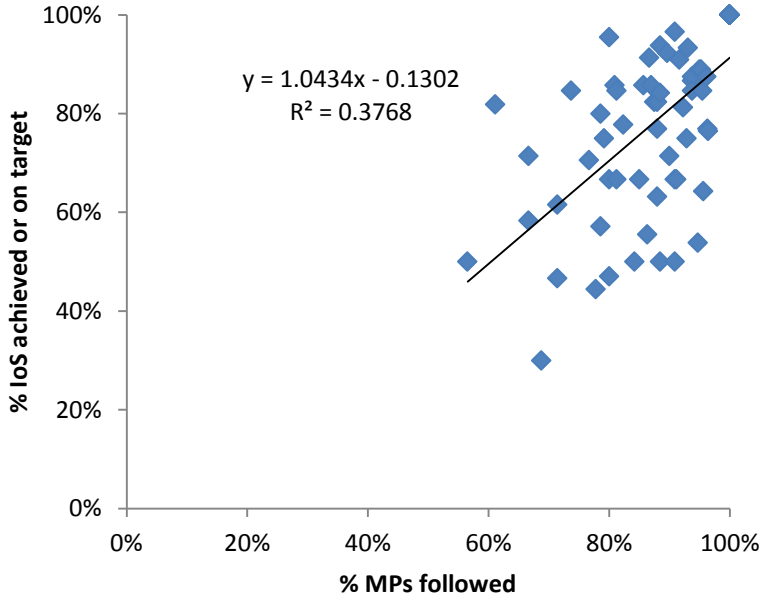


Figure 15 Relationship between achievement of IoS and MP compliance, with the agreements removed that have either MPs or IoS at 100% but not both.

4.3 Capital Items

4.3.1 Progress against schedule

198 capital items were assessed for progress. There were a further 25 capital items which were considered, but not assessed, due to lack of location information or lack of time.

Two items which were assessed had not reached their completion due date so have been excluded from the following analysis.

196 capital items, which had reached their completion due date, were assessed from 88 parcels on 54 agreements; of these, 72% were considered complete.

Table 22 Progress of Capital Items

	No. of CIs	%
Not started	37	19
Partial	18	9
Completed	141	72
Total	**196**	

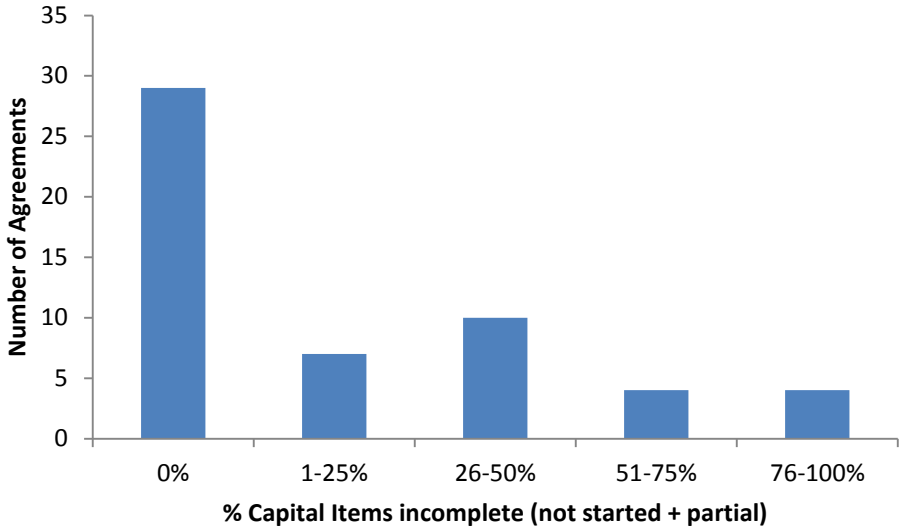


Figure 16 Distribution of progress on Capital Items across agreements

Table 23 Progress of Capital Items by type

Capital Item type	Not started	Partial	Completed	Total	% complete
Scrub/Bracken control	5	7	15	27	56
Tree planting/mgmt	12	8	25	45	56
Landscape items	5	1	15	21	71
Boundaries	8	1	24	33	73
Fencing	6	1	27	34	79
Species	1		4	5	80
Access			10	10	100
Ponds			4	4	100
Professional help			3	3	100
Re-intro of livestock			11	11	100
Wetlands			3	3	100
Total	**37**	**18**	**141**	**196**	**72**

Some of the 'Not started' items may have been completed but lost (e.g. otter holt washed away) or regrown (scrub). Clearly scrub and bracken may need to be treated more than once over a 10-year agreement. We would expect boundaries and fencing to have been completed early in the agreement but 20% of these had not been completed when surveyors visited. The area to be cleared or planted was not always obvious, making assessment of completion difficult.

It was expected that a higher proportion of items with completion dates early in the agreement would have been completed, which is the case for 2007 and 2008, but Figure 17 shows the lowest completion rates are in 2011 when most agreements would be around mid-way through the agreement period. The items due later in the agreement may represent a second group of Capital Items, agreed after a mid-term review. The small sample size, particularly in the later years may be skewing the result, especially as there may be several CIs from the same agreement, due in the same year.

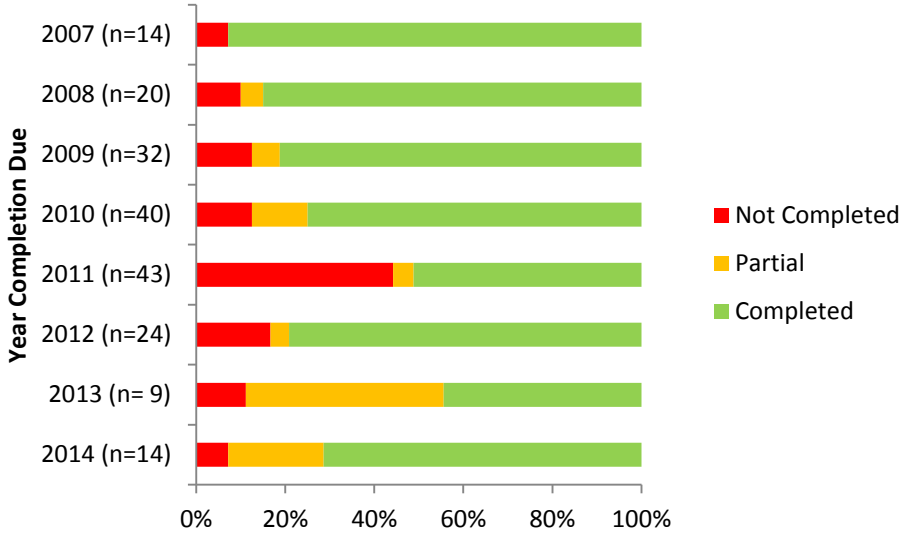


Figure 17 Percentage of Capital Items completed related to Year completion due

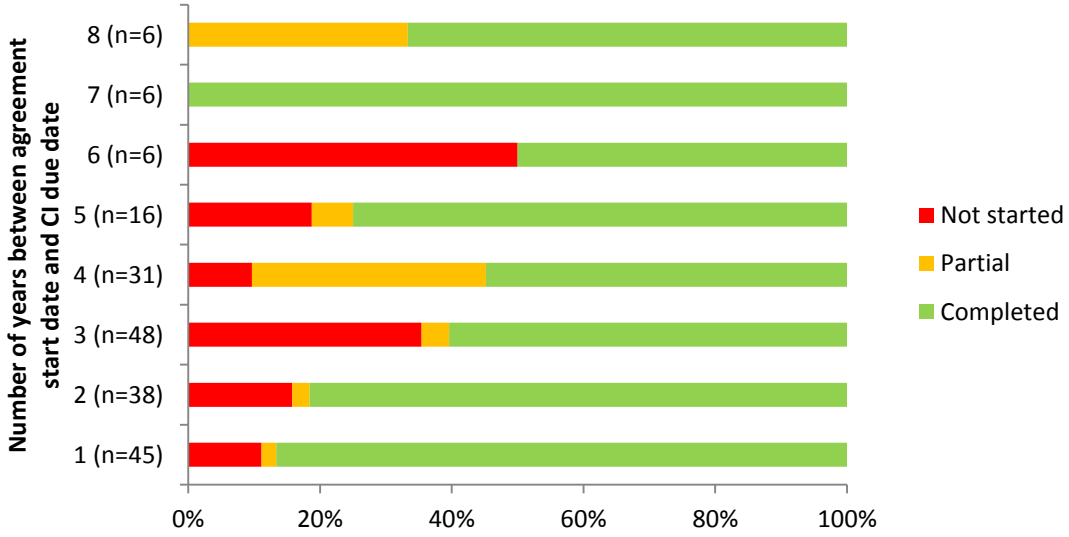


Figure 18 Percentage of Capital Items completed related to number of years between agreement start date and CI due date

When the data were re-plotted in terms of numbers of years between the agreement start date and the CI due date, CIs were less likely to be completed when the due date was between three and six years after the start of the agreement (Figure 18).

4.3.2 Quality of work

A quality assessment was made for the Capital Items which were considered complete (Table 24).

Table 24 Quality of Completed Capital Items

Quality level	No. of CIs	%
Good	119	84
Adequate	17	12
Poor	4	3
Total	**140**	

In most cases quality was high, but in a substantial proportion (15%) it was only 'adequate' or poor.

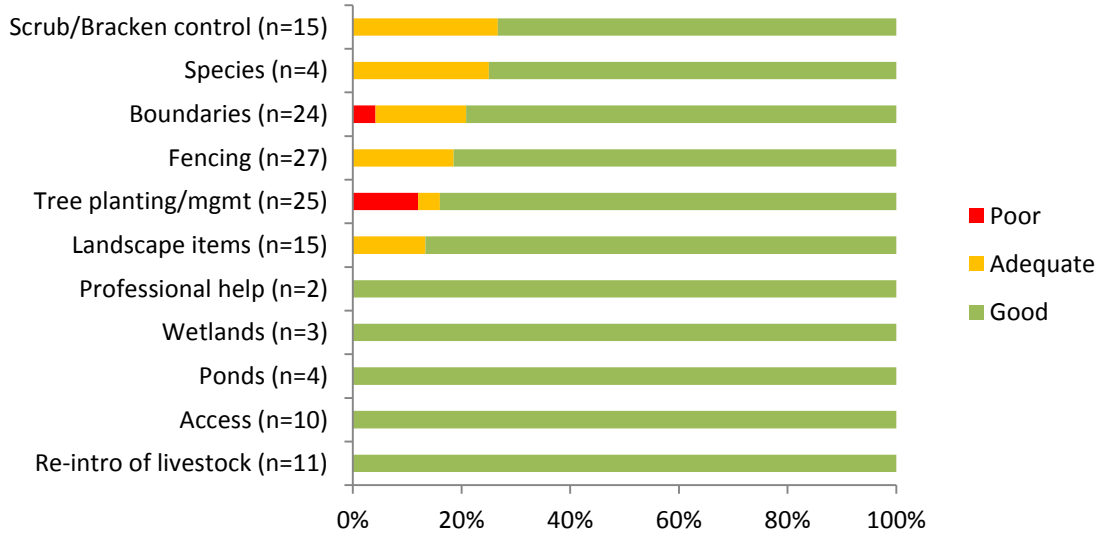


Figure 19 Quality of Completed Capital Items

Poor quality was associated with tree removal, tree planting, tree guards and hedge planting. As the agreements were around five years old when they were visited, in many cases it was difficult to tell whether this poor quality was due to poor installation or poor follow-up maintenance. Sometimes trees were planted in inappropriate places, e.g. in a very wet valley bottom or under a full canopy (and hence in dense shade). Adequate quality was recorded for scrub and bracken control, stone walls and hedges, fencing and gates.

One might expect a positive relationship between completion of Capital Items and compliance with management prescriptions, if both are related to the engagement or

commitment of agreement holders. However, Figure 20 shows this is too simplistic, with no significant relationship between the two. There may be more variables that affect Capital Items, such as contractors letting the agreement holder down.

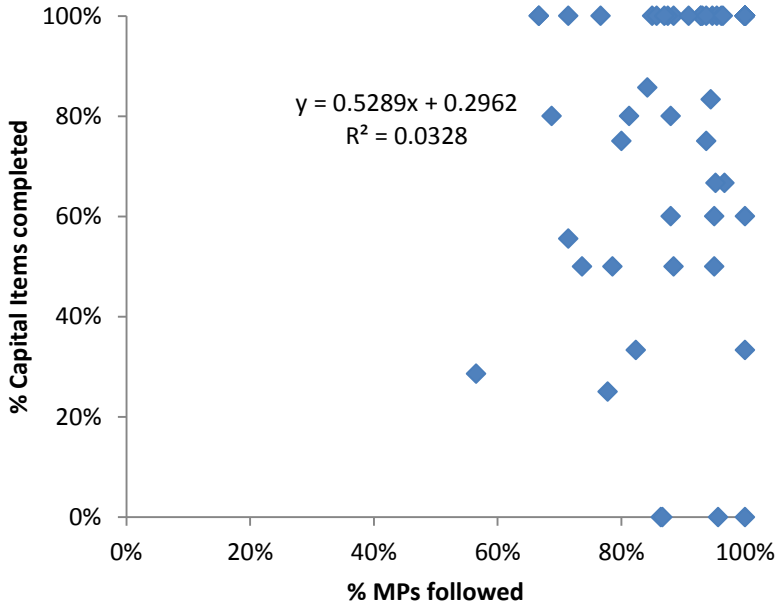


Figure 20 Relationship between MPs followed and CIs completed

4.4 Discussion of observed progress towards outcomes

In the majority of cases, for options selected, Indicators of Success and Management Prescriptions were appropriate, set at the right level and either achieved or on course for achievement. However, this was not always the case, and the discussion below focuses particularly on those instances where things were less than ideal, and the reasons why.

4.4.1 Selection of appropriate options

The selection of appropriate options is clearly fundamental to an effective agreement. Only 2% of options assessed were considered to be completely inappropriate but there were reservations concerning a further 10%. Many of the problems concerned grassland options, and some of these arose from allocation of grassland features to the wrong FEP code. We found that the quality of some grasslands had been exaggerated in the FEP code allocated, leading to improved and semi-improved grasslands being put into HK7 'Restoration of Species-Rich grasslands' when they had little chance of achieving the IoS without much more radical intervention. It is understandable that some FEP surveyors may have been concerned that grasslands mapped as semi-improved (G02) would not be included in HLS options even where there was potential for restoration to species-rich grassland; they may therefore have allocated these parcels to BAP quality grassland codes such as G04 or G06 condition 'C' where they considered there was potential for restoration. Also some FEP maps

are produced in winter when it is hard to assess grassland quality. Nevertheless it is surprising that improved grassland and very species-poor semi-improved grasslands have not been rejected or allocated to an alternative option by NE project officers during the process of agreement negotiations.

This issue over grassland quality was also raised by the CEH study: "*The "habitat quality inflation" observed in the FEPs led to some features being placed in maintenance options when restoration or creation would have been more appropriate. This was particularly an issue for the use of **HK6** and **HK7**, where **HK6** was used on semi-improved swards, instead of **HK7** or indeed where the latter was used on such swards with no clarity over how restoration would be brought about*." (Mountford *et al*., 2013).

4.4.2 Appropriateness of IoS

Ten percent of IoS were considered to be of an inappropriate type; 24% were thought to be set at an inappropriate level. Problems which arose frequently include:

- Vague expression of IoS which left the objective or target unclear.
- Failure to clearly define terms (eg. desirable broadleaves) and specify indicator species.
- Lack of a detailed vegetation map to allow change in habitat extent to be assessed, especially for upland mosaics and within-field change between grassland types and other habitats.
- Lack of baseline data and repeatable methodologies for assessment of change in target populations.
- Failure to specify who is responsible for recording information and monitoring populations, especially where these require specialist knowledge or 'regular' visits.
- Use of IoS which are not relevant to the site or particular parcels; although NE may have good reasons for making certain IoS mandatory, the AH may take less notice of the IoS if they think that they are not specific to their agreement. Inclusion of irrelevant IoS and MPs also make the relevant ones more difficult to find. The same confusion arises where there are several parcels in an option but some IoS only apply to some parcels.
- Failure to specify at what point in agreement it is expected that IoS will be achieved (where 'by year X' is not given, it implies that the IoS must be achieved from Year 1).

4.4.3 Achievement of IoS

61% of IoS had been achieved, 18% were on target, 21% were thought unlikely to be achieved. The proportion not on target was significantly higher for IoS classed as of inappropriate type or level. There was not a lot of difference in levels of achievement between options or habitats, but some types of indicator had lower achievement rates than others, for instance, IoS referring to positive indicators had a low achievement rate compared to scrub control. Failure to achieve some IoS will have more impact on the achievement of objectives than others, as some are directly related, such as the maintenance or enhancement of populations of target species, whilst others may be inappropriate or irrelevant, for example, referring to features not present in the parcel.

It is often difficult to identify a single reason to explain why an IoS has not been achieved but approximately 41% of IoS thought unlikely to be achieved were expected to fail because management prescriptions had not been followed, about 44% because the type or level of IoS was inappropriate, and a further 15% for other reasons, including wrong FEP codes, inappropriate options, unclear or conflicting IoS or inadequate management prescriptions

4.4.4 Appropriateness of Management Prescriptions

Very few (3%) MPs were thought to be inappropriate, and these were mostly irrelevant rather than wrong, i.e. referring to features which were not present, others were too vague, or impractical.

4.4.5 Implementation of Management Prescriptions

About 11% of the MPs which could be assessed, were not being followed. Implementation rate was significantly higher for MPs which surveyors thought were appropriate than those deemed inappropriate. There was not much variation in the rate of implementation between options or habitats, but some types of MP had a lower rate of compliance (e.g. mowing regimes) than others (e.g. protection of historic features).

4.4.6 Capital Items

72% of Capital Items assessed had been completed by their due dates, with a further 9% partially completed. There was a higher completion rate for some Capital items (e.g. fencing) than others (e.g. tree planting). Follow-up or maintenance was sometimes poor, for example some items such as scrub and bracken control had been completed but had regrown and required a second treatment. Surveyors reported that 84% of the completed items were of good quality.

5 OVERVIEW OF AGREEMENT HOLDER ATTITUDES, ADVICE AND SUPPORT PROVISION

5.1 Assessment of the provision of advice and support

Section 5 reports on the findings arising from interviews with the agreement holders, NE advisers and third party advisers. The main part of the section deals with the 100 agreement holder interviews. Section 5.1 presents agreement holder views on the quality, appropriateness and timeliness of the advice and support. Section 5.2 assesses the role of advice and support in the delivery of agreement outcomes, including the perceived importance of advice and support. This section includes the analysis of the NE adviser and third party adviser interviews.

In this section, *Advice* is taken to include the provision of information about habitat management and associated prescriptions so that the agreement holder knows what they are doing.

Support includes personal encouragement, motivational guidance, praise; discussion on management issues and both successes and mistakes. Support helps the agreement holder implement the agreement and see it through to the end.

5.1.1 Quality of advice and support

The quality of advice and support was assessed through several questions throughout the interviews with agreement holders. For each agreement there was a particular focus on the options that were assessed during the fieldwork. This section focuses on a series of questions in the final section of the questionnaire that looked at the agreement holders' perceptions of the effectiveness of these options and at their awareness and understanding of the Indicators of Success (IoS).

The first questions referred to the effectiveness of the options (Figure 21).

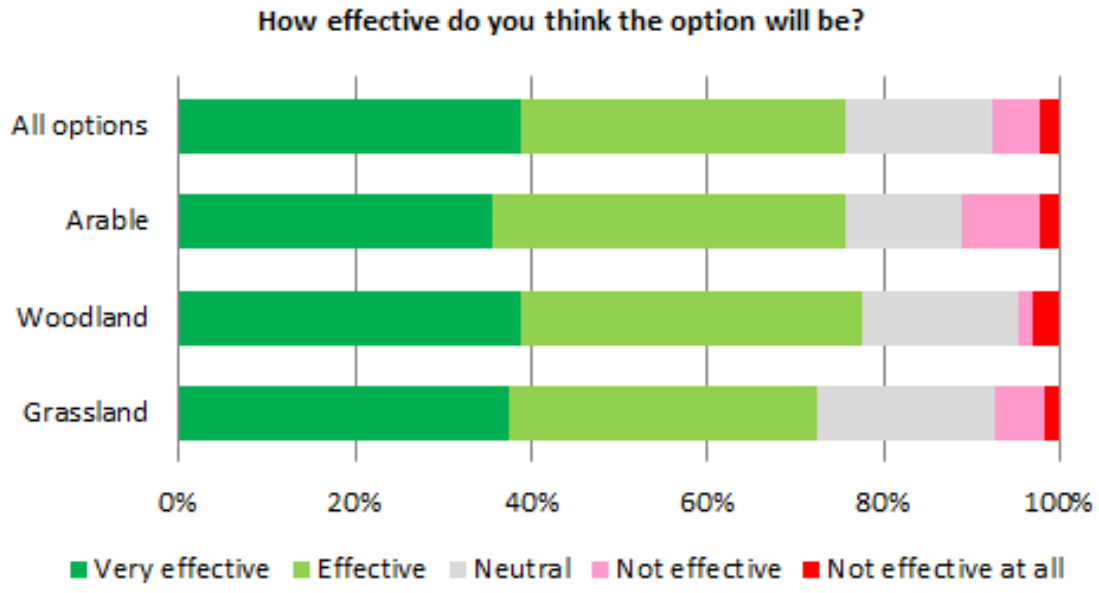


Figure 21 Agreement holder views on the effectiveness of option by broad option type

Agreement holders were asked to indicate how effective they thought the option would be in reaching the intended outcomes as set out in the HLS agreement. Most agreement holders thought their option management would be effective in achieving the intended outcome, with a consistent three quarters across all options saying that they would be either very effective or effective, i.e. effectiveness scores were high for the majority of options. Arable options had the highest level of 'not effective' or 'not effective at all' scores, at just over 10%.

The agreement holders were asked whether the outcomes of each option were important to them. Over half of all agreement holders indicated that the outcomes were very important to them and this is consistent over all options, but highest for arable options, where it was over 60%. Only in 6% of options were the outcomes rated as unimportant.

The agreement holders were asked if the management prescriptions outlined in the agreement documentation were the best management for the intended outcome. The results are shown in Figure 22 below.

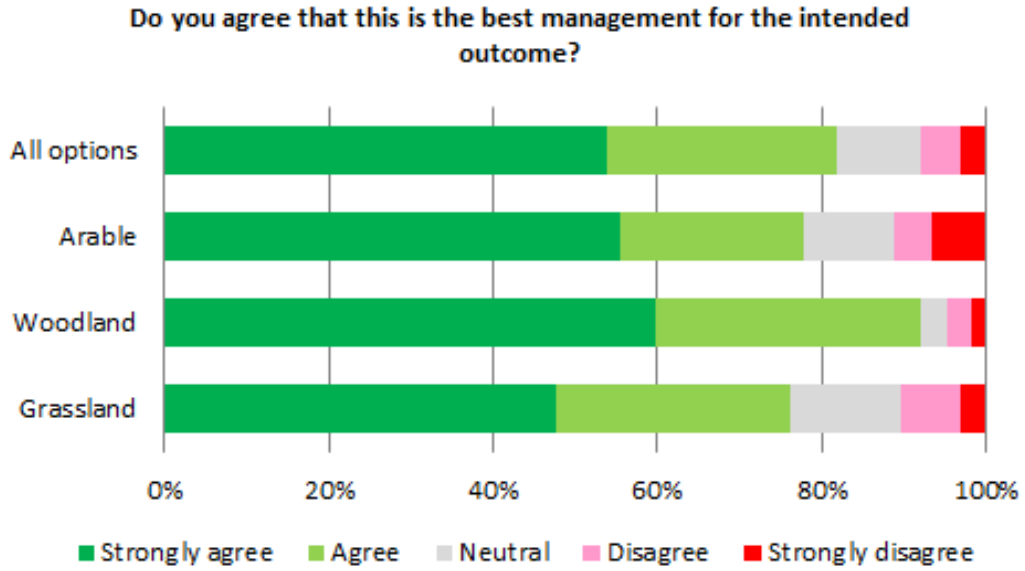


Figure 22 Agreement holder views on whether the prescribed management would achieve the intended outcome (by broad option type)

Overall the agreement holders felt that the management prescriptions outlined in the agreement documentation were the most likely to achieve the intended outcomes. There was little variation but woodland options scored the highest and grassland the lowest, with under half strongly agreeing with the question. In the case of arable and grassland options the management prescriptions will interact more directly with agricultural activity. With grassland it is likely that the HLS management will exist side by side with the agricultural activity (sharing), whereas with arable the management might be at the parcel edges (sparing). Given this clear distinction the lack of variability between the three main groups of options is quite reassuring.

For two thirds (68%) of the options assessed in the interviews, agreement holders responded that the advice and support received did increase their awareness of and give them a new

perspective on the target features. This high positive response rate is consistent across option types as shown in Figure 23 below.

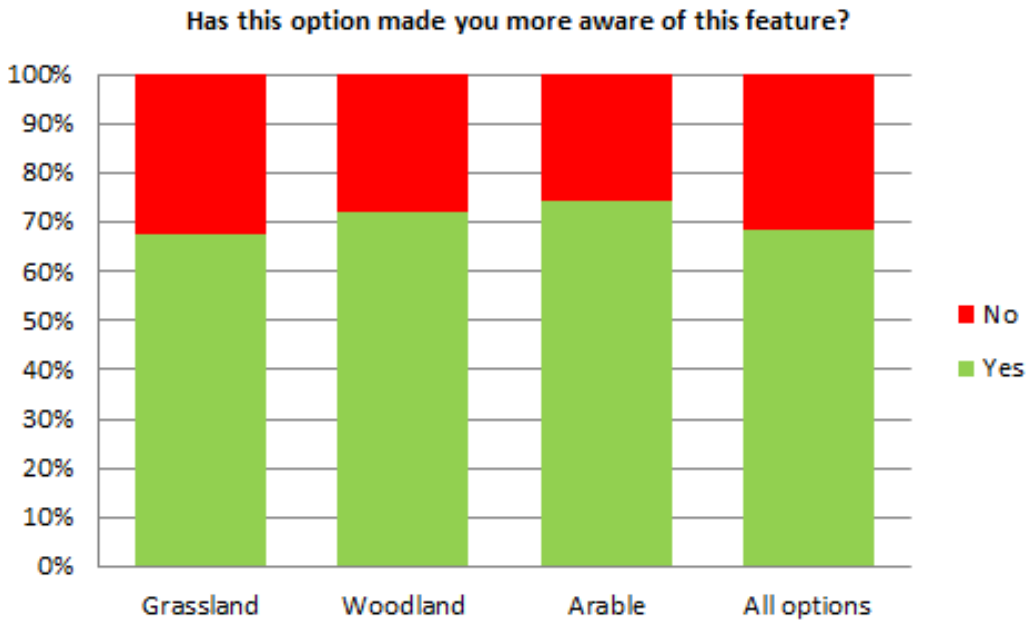


Figure 23 Awareness of feature by broad option type

Further analysis shows that the agreement holder response to this question does not vary by region, the degree of dependency on agricultural income or understanding of management variables.

A slightly higher level of positive response was received when the agreement holders were asked whether the advice and support they had received had drawn their attention to the appropriate management requirements for each option. Here 77% replied that the advice and support had made them more aware. Again the response was consistent across the options but was highest response was for arable options (81%).

Several questions were also asked about the IoS. A consistent positive response of just over 70% was received for all options when agreement holders were asked if they were 'aware of the IoS for this option'.

All of the respondents were then asked whether the IoS had been adequately explained to them. The response is shown in Figure 24 below.

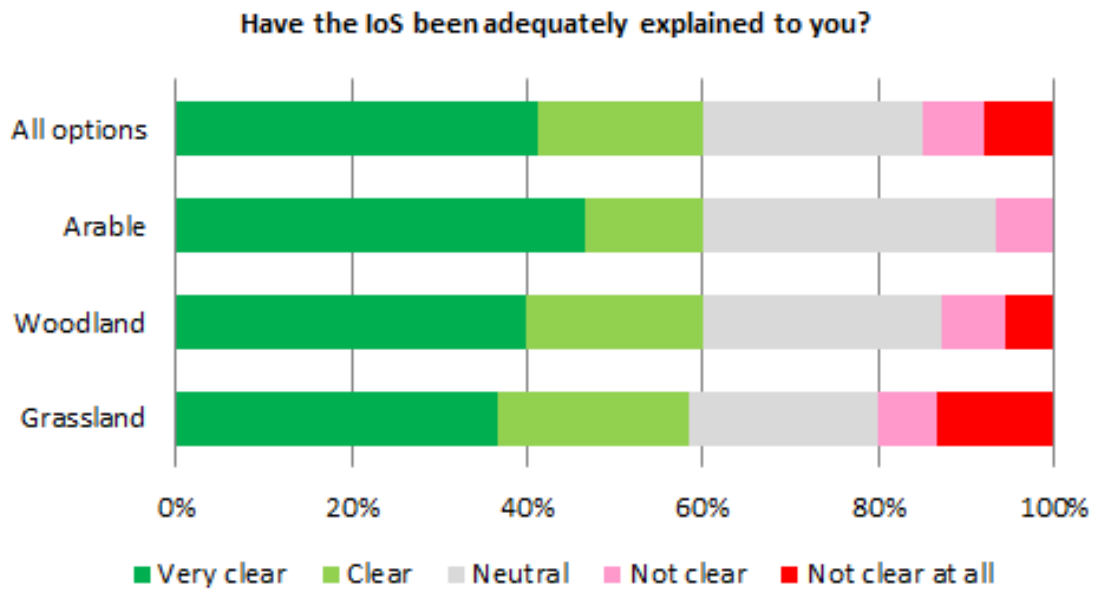


Figure 24 Agreement holder views on the clarity of IoS (by broad option type)

The analysis here is based on the response of the agreement holders in relation to 250 options (87% of all the options assessed). As with other questions, the responses were consistent, with over half of agreement holders saying that IoS for that particular option had been either very clearly or clearly explained to them. However, in 15% of cases the response was either 'not clear' or 'not at all clear'. There was some variation by option type, with arable options having the highest level of explanation and the lowest scores for 'not clear'. Grassland options were the only options to score under 40% for 'very clear' and a fifth (20%) felt the IoS was not 'clear' or 'not at all clear'. Bearing in mind that on grassland the HLS management and the agricultural management have to co-exist, it is here that the IoS have to be the most clear. This will be explored in more detail in the discussion. Further analysis reveals that the agricultural dependant group have the most extreme views with 40% saying the IoS has been 'very clearly' explained and 10% saying the explanation has been 'very unclear'. Similarly those with a low level of understanding seem to have a small number in the very clear category (11%) and a high proportion in the 'very unclear' category (32%). This is perhaps not surprising, as the IoS is part of the understanding being assessed. There is no obvious variation by region.

Only in a handful of cases (6%) had the IoS been changed. This was highest where they referred to boundaries (13%), where the location of the option moved.

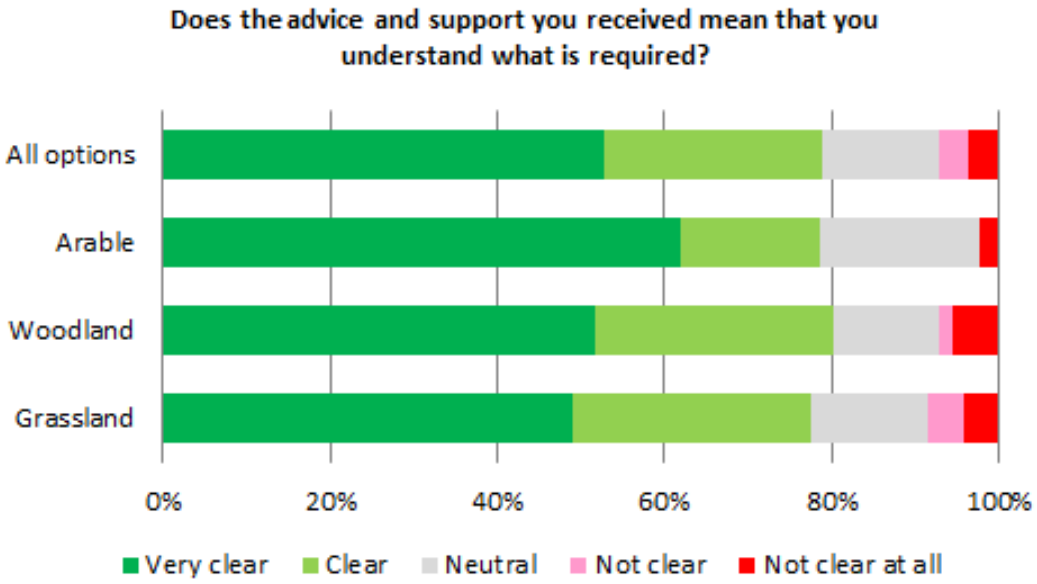


Figure 25 Agreement holder views on the clarity of agreement requirements by broad option type.

All of the agreement holders were asked if the advice and support that they received resulted in them understanding the management and activity that was required.

Overall, in half of cases across all options the agreement holders felt that their understanding was very clear, with the highest levels of understanding relating to arable options. Agreement holder understanding was either very clear or clear in over three quarters of cases. The numbers saying that it was unclear were small for all options types and did not rise above 10% for any option type.

Agreement holders also felt that the advice offered was consistent, with over 85% giving a positive response for each option. The advice received was considered to be inconsistent for only 6% of options, e.g.:

HL10 "[NE} have changed advice on sheep v. cattle and cattle numbers ."

HC16 "Some changes due to re-assessment of progress ."

HK8 "Advice has varied over time with different case advisers."

Overall this appears to be a very positive assessment of the quality of the advice provided by HLS advisers, to agreement holders, mostly by NE but also by third party advisers,.

5.1.2 Appropriateness of advice and support

In the final section of the questionnaire, which assessed each of the selected options, the agreement holders were asked how well the option requirements fitted their current management. The responses are shown in Figure 26 below.

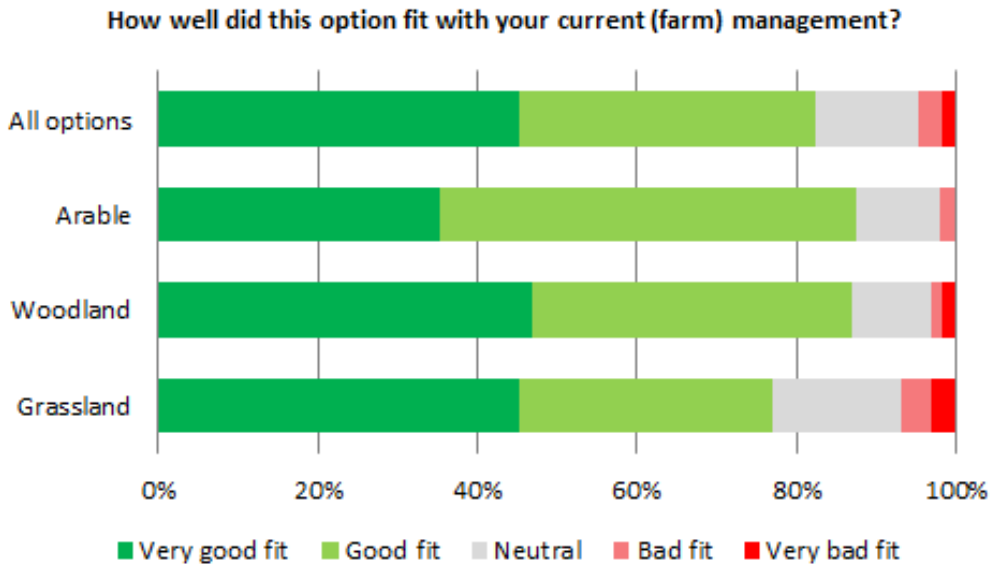


Figure 26 Agreement holder view on option fit with current management

The majority of HLS options seemed to fit current farm practice in an acceptable way. The emphasis here was not that agreement management was easy and that farm management took precedence, but that the option and the management it required were able to sit alongside the agreement holders' ability to manage the land as part of their livelihoods. Overall, agreement holders were of the view that 82% of options were either a very good fit (45%) or a good fit (37%) with the current farm management. There was a slightly lower chance of a very good fit within the arable options, but a greater chance of a 'good fit'. Arable options generally have a more direct impact on farm production, but sometimes through land sparing. In this case the land is 'lost' to production, making it a 'good fit' rather than a 'very good fit'. Interestingly the most negative comments were received about grassland options, linked to grazing levels and timing of operations. This may be because grassland options tend to directly affect the productive area more than options for other habitat types. In this sense it is a 'land sharing' issue and the fit for some is not that comfortable, especially if the option requirements mean a need to change the farming system.

Agreement holders were also asked about the practicality of the advice. The responses are shown in the Figure 27 below.

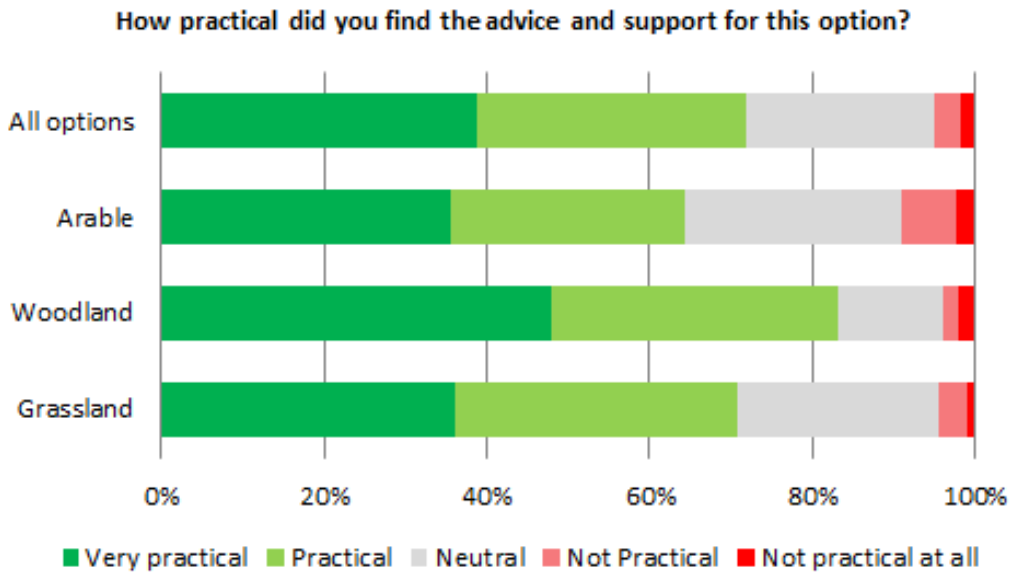


Figure 27 Agreement holder views on the practicality of the advice and support for assessed options.

The advice and support received by agreement holders for the options assessed was considered either very practical or practical for the majority of HLS options (72%). Advice and support was considered to be of no practical use for only 5% of the HLS options. The breakdown by broad option types shows that the Woodland options category scored highly, with 48% being considered very practical. Fewest arable options were considered practical. Further analysis shows that there was no variation in this according to region, agricultural dependency or level of understanding.

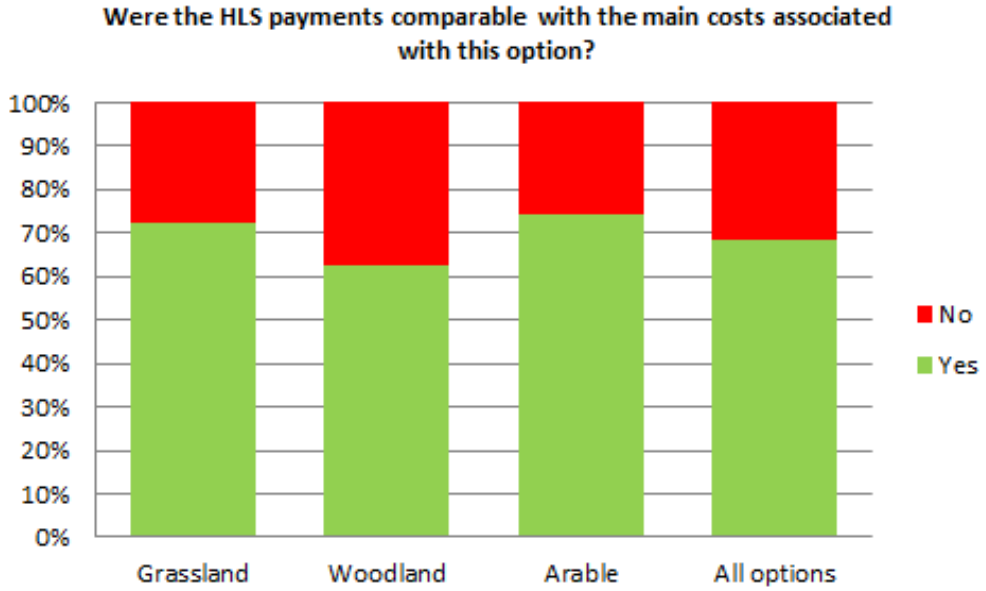


Figure 28 Agreement holder perceptions of the comparability of HLS payments to costs by option type

The final question in this series looked at the comparability of the payments in relation to the costs associated with the option. Agreement holders thought that the HLS payments were comparable with the main costs associated with the option in 68% of cases (

Figure 28). Some examples of where the costs were not comparable are given below:

Grassland

HK7 "Annual payment insufficient to compensate for reduced productivity."

HK 7"Costs more because need more inputs on other fields to compensate and have to buy gimmers rather than shearlings so don't increase sheep numbers."

HK10 "Works out annual payment per sheep is £39/head, which is less than market value for a sheep."

Woodland

HC9 "Didn't cover cost of fencing because of difficult ground along gill."

HC10 "Very out of pocket for the purchase of trees."

Arable

HF12NR "No extra given for re-establishment of failed mixture."

HF12 "Costs more than feeders, which we haven't been able to get on this scheme."

The evenness of the responses suggests that the appropriateness of payment levels is roughly comparable between option types.

Timing of advice and support

In the third section of the questionnaire, detailed questions referred to the development and signing of the HLS agreement as well as the period of implementation that followed from this to assess the timeliness of advice and support provision. For the sake of clarity, advice and support were at times grouped together but, for the question looking at the development of the agreement, they were separated out.

The first part of this questioning looked back at the period when the agreement was developed. Two stages seemed to stand out here, the initial visit and the development of the FEP. Those who referred to the initial visit as having the greatest impact said things like:

'because it highlighted the features'

Initial stages were important as that's when all the important discussion on detail takes place

Had rapport with this man. He suggested FWAG do the FEP.

Got going and developed ideas for the farm

Those who mentioned the formal visit to assess the FEP said things like:

most decision making at this point after FEP had been produced

most discussion took place after FEP had been produced

NE and AH chose options. NE provided expertise with the scheme options that would fit the farm.

What is clear is that these were formative experiences and where they did not occur, or where no distinct stage was identifiable the comments were sometimes less complimentary.

It wasn't shaped - NE put agreement together and took it to AH for signature. Replica of ESA.

NE did it all - no shaping.

Not one stage - long negotiations.

The importance of these stages in shaping the future implementation of the agreement should not be underestimated. In the case of the advice received by the agreement holders, their overwhelming view is that it was received in a timely manner, in just the right amount and of a high quality. In the early stages of the agreement this was followed up by an acceptable level of support in most cases. However, as one agreement holder put it, 'NE have a habit of going quiet on you' and agreement holders hear from the NE adviser less in the later years.

An assessment of the appropriateness of the timing of the advice and support was made with reference to the NE adviser and the third party adviser interviews. This supported the evidence presented from the agreement holder surveys, in that visits tended to take place within the first 2 years and contact was less frequent and more informal in later years. Other visits took place, such as inspections but these were not seen as providing the agreement holder with feedback. Hence the support seems to diminish over time.

5.1.3 Ability to deliver agreements

The agreement holders were asked in an early part of the questionnaire, after they had outlined their agreement, about their ability to deliver the changes that their HLS agreement required. All but one of the agreement holders (99%) felt able to deliver the overall changes in management required by their HLS agreement. Some of the quotes are quite revealing:

"We were careful when we set up the scheme to make sure management was achievable. It was a long iterative process but involved pragmatic approach to ensure objectives were met."

"Been able to but it has been a struggle as having more livestock has been much more labour intensive."

"New topper purchased. Changed mind set away from food production to enhancing the environment."

"Changed management practices - off wintering more. Struggle to find wintering or accommodation ... "

The agreement holder who did not feel able to deliver the changes in management gave the following reason:

"Had challenges getting cattle to graze the site in 2013 and 2014."

As follow-on questions, the agreement holders were also asked how easy or difficult their agreement was to both understand and to implement. For each question three

options were offered to the respondents: was the agreement; 'very complex', 'complex but 'manageable' or 'very manageable'

Looking first at understanding, 86% of agreement holders said that their agreement was either very manageable (34%) or complex but manageable (52%) in terms of understanding

Figure 29). Only 14 per cent felt their agreements were very complex.

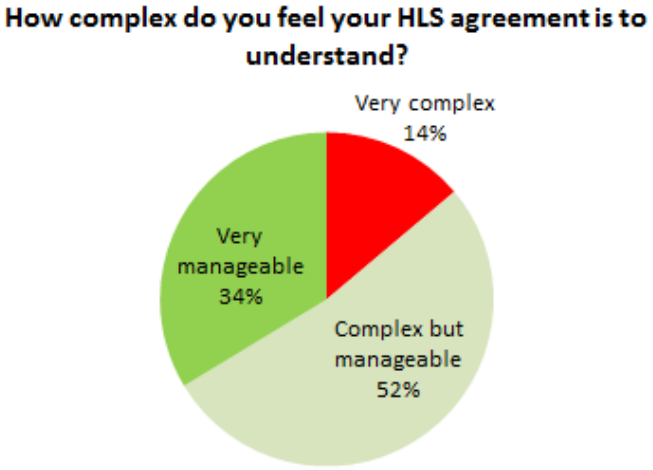


Figure 29 Agreement holder view regarding complexity of agreement to understand

A similar division was revealed when the level of implementation complexity was considered. The majority of agreement holders (91%), said that their agreement was very manageable (33%) or complex but manageable (58%) in terms of implementation. Only 12 per cent felt their agreements were 'very complex' to implement.

The next question asked how comprehensive the agreement documentation was with three options; 'very comprehensive', 'fairly comprehensive' or 'not at all comprehensive'. All but one of the agreement holders (99%) said their final agreements were very comprehensive (47%) or fairly comprehensive (52%).

Agreement holders were then asked how often they referred to the documentation with three options; 'regularly', occasionally' or 'hardly at all'. 'Regularly' referred to several times a year, 'occasionally' was once or twice a year and 'hardly at all' was less than once a year. The majority of agreement holders (57%) said they 'occasionally' looked at their agreement documentation. One quarter of agreement holders (23%) said they consulted their agreement documentation on a regular basis A fifth of agreement holders (20%) said they looked at their documentation hardly at all. The message to take away from this is that the agreement documentation is considered to be a reference document rather than a day-to-day management guide, and this has important implications for the presentation and format of future documentation. Some cross tabulations were undertaken to see if those who found the agreement very complex, were also those 'hardly looked' at the documentation, but this was not the case. It would appear that those who found the agreement complex did refer to the documentation 'occasionally' or 'regularly'.

5.1.4 Management in the absence of HLS

In the set of questions that analysed the selected options, agreement holders were asked how they would have managed the land if it had not been included in an agreement. Information was provided for 279 options (87% of all options). Overall, agreement holders indicated that they would have managed the land/features in a similar way to the HLS prescription for only 14 per cent of the options (Figure 30). This means that in the absence of HLS, the majority of the option land/features could have been at risk from inappropriate management.

Care should be taken when interpreting the columns for boundaries, wetland, soil and water, lowland heath and inter-tidal as less than ten responses were collected for each of these groups, and in the case of inter-tidal only one option in a single agreement was included. However, for the three main option categories, grassland had the greatest proportion (15%) of options that would have been managed in a similar manner to the HLS prescriptions. Nevertheless, the message is clear that in most cases the management without HLS would have been different. In some cases the agreement holder would not have done anything at all; in others they might have managed the feature/land more intensively.

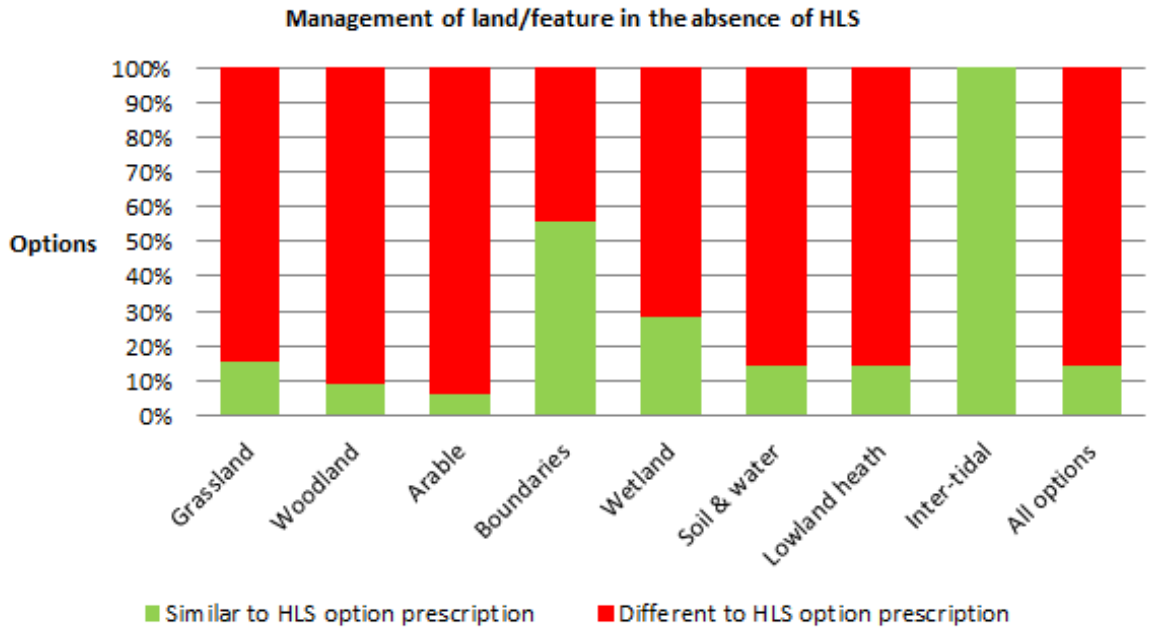


Figure 30 Agreement holder views on management of land/feature in absence of HLS by option type

5.1.4.1 Management in the absence of HLS by habitat type

The following section looks in more detail at the nature of the management that would have taken place in the absence of an HLS agreement, for each of the three major option categories (grassland, woodland and arable).

Grassland

For most of the agreement holders the absence of an HLS agreement would have meant that they would have intensified the land use by activities such as converting to arable production, reseeding, increasing inputs and livestock:

HK6 "Would have been drained and more P and K (phosphate and potash) would have been applied."

HK11 "Rented out as intensive grass with inputs and probably drained."

HK14 "Continued to grow arable, rough heavy land, awkward shape. Very heavy land, autumn grazing, but would still have lost money on it."

HK15 "Higher inputs and higher stocking levels - cattle kept in more over winter than before."

For other agreement holders they would extensify production or reduce management :

HK15 "Probably not grazed or cut."

Woodland, trees, scrub & orchards

Maintaining the existing management regime was mentioned by some of the agreement holders:

HC7 "It would have been left as woodland."

HC20 "Would have been left as it was."

HC20 "Same as before."

Other agreement holders suggested they would have changed their the management practice. For some plots of land this would lead to active changes in management:

HC7 "Not in HLS - arable."

HC8 "Clear felled and planted with hardwoods."

HC10 "Just farmed along with the rest of the field."

HC12 "Grazed more heavily, active weed control with fertilisers."

In other cases there would been passive change resulting from the withdrawal of management:

HC8 "It would be unmanaged."

HC12 "It would not have been managed, it would be in decline."

HC14 "Not managed at all."

Arable land

Many of the agreement holders with arable land options said they would continue their existing management practices and retain the land in arable production:

HG7 "Winter cereals, winter beans, dependent on profitability of the crop."

HF12 "Cropped as part of the field in one of the rotations."

HF12 "Would have been in arable production."

5.1.5 Comparison with management under previous agri-environment schemes

Within the same set of questions and following on from the issues considered above, agreement holders were also asked how the management of the land/features under HLS differed from other agri-environment schemes (AES) they had been in. Eighty of the 100 agreement holders responded. The overall response is shown in Figure 31 below.

The majority of options (68%) that had been included in previous AES were being managed in a similar way under HLS. The woodland HLS option category had the lowest proportion of options being managed differently under HLS. There was only one agreement with a wetland option so this response should not be considered representative of this category.

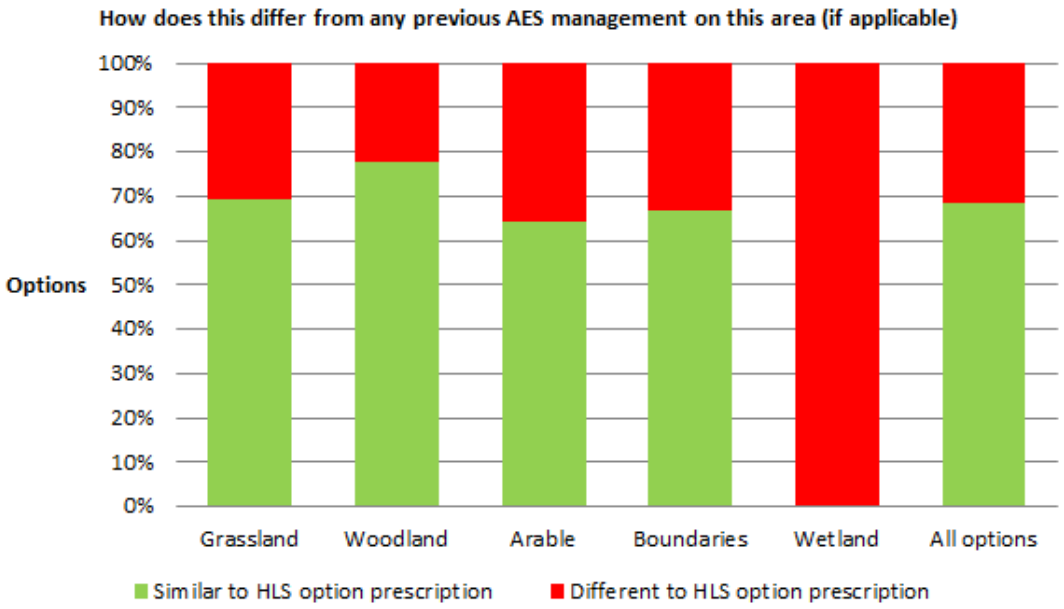


Figure 31 Agreement holder perspective on how HLS management differs from previous AES management?

Examples of HLS options under the three main categories (grassland, woodland and arable) being managed in a different way to previous AES include.

Grassland

HK6 "The grazing period has been shortened from 6 to 5 months."

HK7 "Yes, although in ESA that option was less demanding, more to do now."

HK15 "Similar to CSS - had restrictions on nitrogen application and number of horses that could graze the land."

HK15 "Was not grazed previously."

Woodland

HC8 "Livestock now excluded whereas previously grazed area now planted under ESA."

Arable

HE10 "Increase in biodiversity. They were margins in CSS."

HF12 "Some was previously wild bird cover but others were just arable with no other AES."

5.1.6 Interviewer assessment of agreement holder understanding of options

Each of the interviews with the agreement holders involved an in-depth discussion on at least one and up to four selected options that made up the agreement. After the interview the

interviewers made an overall assessment of the responses across this section, recording for each option discussed whether the respondent was ‘very fluent’, ‘fairly fluent’, ‘not very clear’ or ‘very unclear’.

The responses for each of the option types are shown in Figure 32 below.

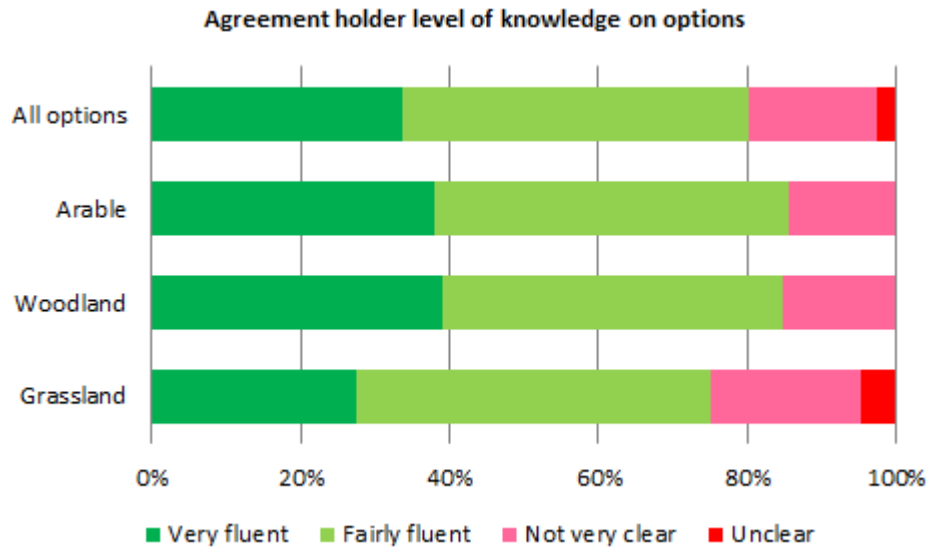


Figure 32 Interviewer assessment of agreement holder level of knowledge by broad type of option

The level of knowledge across all options is very high with an overall proportion of 80% being assessed by the interviewers as being either ‘very fluent’ (34%) or ‘fairly fluent’ (46%). Over all options, 3% were ‘very unclear’ and 17% ‘not very clear’. There is some variation by option type, with the grassland category containing all those who were felt to be ‘very unclear’ and a quarter who were either ‘not very clear’ or ‘very unclear’.

The 248 responses to these questions on the options (87% of all options considered) were coded for each agreement holder to create a three-way classification as an indicator of agreement holder understanding over all options, as follows:

- High = All or most options ranked ‘very fluent’ (no ‘not very clear’/‘unclear’ allowed).
- Medium = All/most ranked ‘fairly fluent’ (Mixed ‘very clear’ / to ‘unclear’ codes).
- Low = All or most ranked ‘not very clear’ or ‘very unclear’.

The results are shown in Figure 33 below.

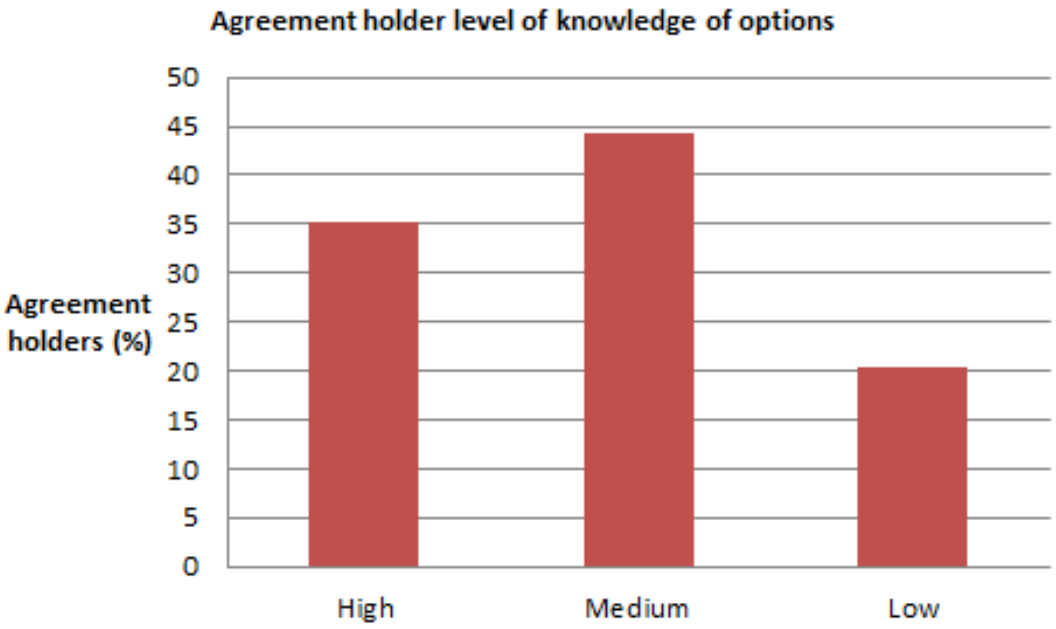


Figure 33 Interviewer assessment of agreement holder fluency of knowledge regarding options within their agreement

Running the analysis in this way reveals that 35% fall into the 'High' category (31), 44% into the 'Medium' category (39) and 21% in the 'Low understanding' category (18). Of the 102 agreements, 88 were coded in this way with 14 omitted because of missing data.

Based on this analysis, it appears that most agreement holders have a sound or reasonably sound level of understanding across the options in their agreement. This was found to be an important factor in the successful delivery of agreement outcomes, however, no clear relationship was found with advice input (see section **Error! Reference source not found.**).

5.2 Role of advice and support in the delivery of agreement outcomes

5.2.1 The importance of advice and support as perceived by agreement holders

Firstly, in this section the agreement holders' perception of the progress made against the HLS objectives is assessed. Each agreement holder was asked early in Section 2 of the questionnaire, to identify the key objectives of the HLS agreement and whether these had been achieved (fully, partially or not at all).

The agreement holders identified a total of 248 main objectives for their HLS agreements with an average of 2.4 per agreement. Just over half (51%) of the 248 objectives had been 'fully achieved' in the opinion of the agreement holder. Agreement holders considered that they had 'partly achieved' 45% of the main objectives and only 4% had 'not been achieved'.

Figure 34 shows the results of combining the responses at agreement level, so that all those who felt that they had achieved all their objectives fall in one group, those who had achieved some form a partial group, and the third group contains those who have not achieved any of their objectives.

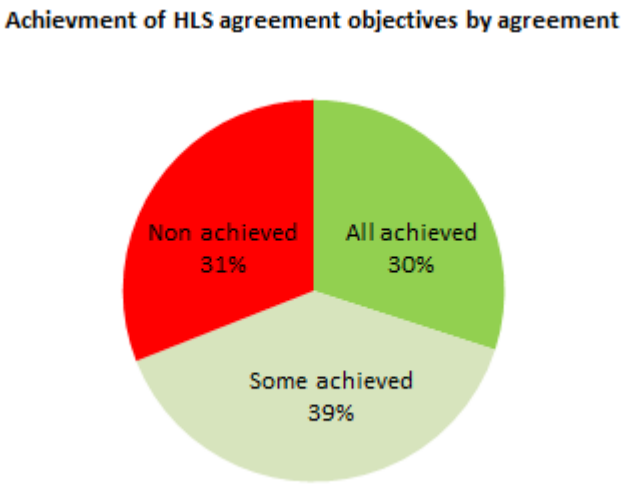


Figure 34 Agreement holder views on the extent to which HLS objectives have been fully achieved, by agreement

The agreement holders were fairly evenly divided between those who indicated they had fully achieved all the agreement objectives (30%), fully achieved some of the objectives (39%) or had fully achieved none of the objectives.

The responses from the agreement holders to this question were referred to in the interviews with the NE advisers. The agreement holders' objectives and their views on achievement were shared with the NE adviser, and the NE adviser then indicated whether they 'fully agreed,' 'partially agreed' or 'disagreed' with the agreement holder's assessment of progress on the HLS agreement. Comments were received from NE advisers on 208 of the objectives offered by the agreement holders (83% of the objectives mentioned by the agreement holders). Where there is no response this is generally because the NE adviser was not able to comment as they had only recently taken over responsibility for the agreement and had not visited the site or did not have enough information. In 150 cases (72% of 208 objectives for which NE adviser responses were received), the NE advisers agreed with the assessment of the agreement holder. In 58 cases they either partly agreed (14%) or did not agree (14%). Looking at the responses for each NE adviser, in over half (56%) of the 89 cases where a response was recorded the NE adviser 'fully agreed' with the agreement holder's assessment of the objectives they outlined. Most were either fully or partially achieved, so this is likely to be an affirmation of the positive response from the agreement holders. Only in 15% of cases did the NE adviser not fully agree with any of the assessments made by the agreement holder.

Looking at the comments reveals that in some cases the agreement holder has included options that were not in the agreement. For example:

> *"NE adviser says there are no HE (arable) options so does not agree."*

Alternatively, the NE adviser sometimes felt that the agreement holder was being too negative by suggesting that the objectives had not been met.

> *"…has been quite harsh on themselves - the pasture is in better condition and if the Marsh Frit is not there then that might not be their fault - as a species they do this so should not be surprised."*

In a one or two cases the NE adviser could not agree with the overall tone of the agreement holder's assessment and, in their view, the poor articulation of the HLS objectives. When an agreement holder stated that they could not recall any objectives as they were only in it for the money, the NE adviser responded:

> *"Disappointing to hear this and rather disheartening. However AH is a business man, with a farm to run, and is developing his business and for that he needs income streams"* adviser

Even when fully agreeing with the statements the NE adviser sometimes offered further observations about the need to view HLS agreements differently, as these two quotes suggest.

> *"He's obviously stating that it's all in good order. He should be aware though that the HLS is a bit more involved than ELS, and it's not simply about maintenance."*

> *"Fully achieving what he has committed to do. But there are still phosphate and nitrate issues."*

Overall, the NE adviser responses and comments provided a strong affirmation of the agreement holder's assessment of their own performance and the progress of the HLS agreement.

The issue of consistency of advice and support was also addressed in the interview. In the set of questions (Section 3) that considered the provision of advice and support, all of the agreement holders were asked whether their view of the advice and support they had received had changed at all since they signed the agreement. This was an open question so the agreement holders were free to respond as they felt appropriate. An assessment of the responses shows that just over one third of agreement holders (34%) said that their view had changed since the start of the agreement. A full set of the responses is contained in Appendix 4.

Looking more closely at those who said their view had changed, there was a mixture of positive and negative comments. The following is a selection of comments from the agreement holders, particular where time has either improved or weakened the view of the advice and support provided at the start of the agreement.

Positive change over time

> *"Start no good, but better since then."*

> *"Possibly improved - think it was perhaps too bureaucratic at the beginning."*

> *"Yes because we asked for advice and chased when hadn't heard anything."*

Negative change over time

> *"At beginning very good, but following advice has been lacking, so feel not so good now."*

> *"Yes, the advices were really high quality at the beginning then you realise it was perhaps not the best thing to do. Because every farm is different and it is hard to know if it will work here."*

> *"The quality of advice and support has deteriorated over time. Great to begin with but now I can't wait until the scheme ends."*

It is worth noting that in 39% of agreement holders recorded a change in their view of the advice and support received at the start of the agreement. .

A little further on in the questionnaire, the agreement holders were asked if they had needed additional advice after the HLS agreement had started. This was a yes/no question with further explanation requested for those who answered yes. Two thirds of agreement holders (65%) indicated that they had received additional advice after the signing of the agreement. Mostly this came from an NE adviser, but also occasionally from an independent adviser. It is not possible to say whether this advice was requested by the agreement holder or whether it was associated with a visit. However, looking across the response to the whole questionnaire, there is more talk about phone calls and emails than visits or requests for visits, so it is likely that this refers to communication generated by the agreement holder. Where a visit is concerned these tend to be fairly early on in the agreement term or associated with the mid-point and involve the NE adviser who prepared the agreement. Agreement holders consider that inspection visits yield less information that they would treat as advice.

In the last set of questions in the questionnaire, after the advice and support and selected options were discussed in detail, all of the agreement holders were asked 'how important the advice they received at the start of the agreement was to the successful delivery of the HLS agreement. The respondents were given 5 options from 'very important' to 'very unimportant'. The results are shown in Figure 35 below.

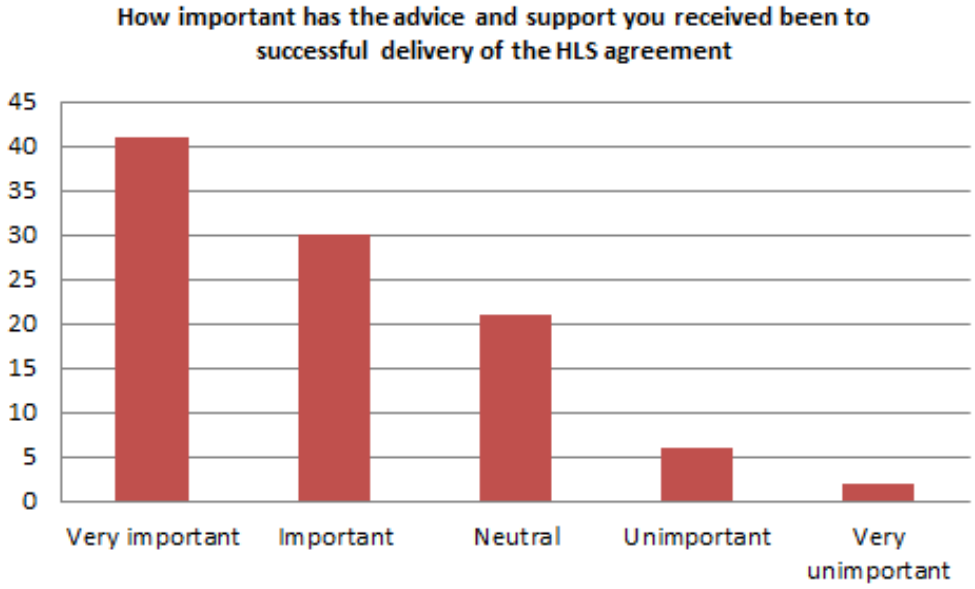


Figure 35 Agreement holder views on the importance of advice and support received to successful delivery of HLS agreement

The majority of agreement holders (71%) said the advice and support they had received had been 'very important' (41%) or 'important' (30%) to the successful delivery of their HLS agreement. Just over a fifth were neutral on the issue. Only 2 agreement holders said the advice and support was 'very unimportant'. Examples of comments are given below.

Very important

"Very important both for management of hay meadows and for direction of management for rough grazing."

"Because we ensure that we are doing what we should. We do get the money and it means that we are doing what we should on the SSSI land and the land adjoining it."

"Without the advice received - wouldn't have had a clue about managing the parcel."

"Very important - learning process, especially with the meadow management."

Very unimportant/Unimportant

"NE haven't really been helpful in delivery. Only related to procedure/admin. Third parties involved in creation and delivery."

"Knew what I was doing. HLS didn't change any land practices."

Also in this final section the agreement holders were asked about their attitude to the longer term impact of the HLS agreement on the areas/features on their holding Three responses were available: very positive, fairly positive and not positive. There was then an opportunity for the respondents to provide some comments; the full set of these comments can be seen in Appendix 4. The majority of agreement holders (94%) indicated their attitudes towards the longer-term impact of their HLS agreements were either very positive (56%) or fairly positive (38%). Only six agreement holders said their outlook was not positive. The following quotes give an idea of the range of perspectives held by the agreement holders, but it was clear that financial concerns seem to arise without any prompting.

Very positive

" 'We are there now' - and AH commented that he would carry on the work once the agreement comes to an end."

"Found it interesting myself made more aware of wildlife. Won't keep features going if no payments in future."

"AH very enthusiastic about the scheme and what she is doing on her farm and about combining conservation with production of good quality animals."

"There have been massive improvements to the farm all round. See no reason why this shouldn't continue if funding is there."

Not positive

"Not positive as you don't know what will happen especially with NE and funding. This has been seen through their change in commitment to the later stages of the agreement."

"Sick to death of rules & regulations, just want to get on & farm. Compliance = pain."

"Once the scheme expires there will be management but it won't be in the same way as what the scheme is trying to achieve. It will be well-managed but not with as much emphasis on environment."

A follow-on question asked the agreement holders if the HLS agreement had met their expectations. This was a yes/no question with the opportunity for comments to be recorded. All but 5 agreement holders (95%) said 'yes', that the HLS agreement had met expectations, in some cases quite considerably.

Met expectations

"It has exceeded any expectation". Educated AH in how to be a pro-active farmer with regard to the countryside, had it not been for the HLS he would probably have gone the other way [i.e. more production orientated].

"You have to be a certain type of person to get the most out of HLS - you aren't always bound by prescriptions, need to speak to adviser to discuss things. Both aiming towards the same goal."

"Has achieved things, except for the snipe, which he has no control over. The birds aren't there."[16]

Not met expectations

"AH doesn't feel HE10 and HK11 have achieved much - is more positive about HF12 and HQ6. Had originally thought of including HQ6 area in farm walk but hasn't been developed."

"NE need to listen to farmers. Weather and season plays more of a part on how the habitat looks than anything else. Farmers understand that, Natural England don't. This can impact on the delivery of outcomes."

The final question of the interview enquired whether the agreement holders 'felt adequately supported throughout the HLS agreement thus far'. The issue of support was not defined here but earlier questions had covered advice, including the agreement documentation. This question covered the contact since the agreement had been signed that would aid the delivery of that advice. Most agreement holders (82%) replied positively that they had felt 'adequately supported' so far. Just under a fifth (18%) replied negatively with 3 agreement holders not providing a response.. The lack of support extends to third party advisers as well as NE as these quotes illustrate.

Felt supported

"Very much so, #### has helped us manage things pro-actively with a shared understanding over the objectives/aims."

"Very much so. However, like many organisations NE do go quiet sometimes."

[16] This may be an example of an unrealistic indicator of success

Not felt supported

"In the first few years of the agreement but not in the later stages. NE have less commitment now."

"Not really, certainly not from NE. Trying to establish a better relationship with them now."

"Hasn't received much advice from NE - AH feels he would have benefited from more support throughout the implementation of the scheme."

These questions regarding the level of support were cross-tabulated to assess whether those who indicated that they had not felt supported were also those who hardly looked at the documentation. This analysis did not reveal any such trends, suggesting that those who felt that they had not been supported read the documentations either regularly or occasionally.

5.2.2 Changes in agreement holder attitudes, capacity and knowledge

In this section the analysis turns to evidence of changes in attitudes, capacity and environmental knowledge. such changes are hard to determine and the evidence comes from a range of questions throughout the agreement holder questionnaire.

5.2.2.1 Changes in agreement holder perspective on HLS agreement

Agreement holders were asked in Section 3 of the questionnaire to look back to the start of the agreement and consider if the overall objectives of the HLS agreement were 'very challenging', 'reasonable' or 'not demanding enough'. Two thirds of agreement holders (66%) thought that the overall objectives of their HLS agreement at the start of the agreement were 'reasonable'. A third of agreement holders (33%) thought that the objectives were 'very challenging' and a single agreement holder (1%) thought that they were 'not demanding enough'. There was room for the agreement holders to comment and some of the comments are shown here:

Reasonable

"Fine being put into practice but the paperwork side of things is off putting and more complex."

" This is what the Wildlife Trusts do."

"Found them quite challenging, but relished that."

Very challenging

"Without the help from the adviser, would not have been able to understand the agreement."

"The number of options (9) which are all different is demanding."

"There was a lot of capital work involved in the first years, rather demanding."

The agreement holders were then asked if their perspective had changed with the inclusion of a follow on question 'has that view changed?'.

Comparing the results shows that there has been a noticeable shift in the views of agreement holders who originally thought at the start of their agreements that the overall objectives were very demanding. Of the 32 agreement holders in this group, 20 now think the objectives are 'reasonable'. No agreement holder changed their perspective to consider the agreement more challenging now than at the start. Overall, 86% of agreement holders now think that the overall objectives of their HLS agreement are 'reasonable',. Examples comments from agreement holders who have changed from very challenging to reasonable are:

> *"Got on top of requirements. Occasional need derogations - cleaning ditch out, outside legitimate time to do it. Had no trouble getting permission."*
>
> *"Have gotten used to it."*
>
> *"#### help meet the demands now - good working relationship."*
>
> *"familiar with what is required."*
>
> *"Changed so now I feel we are ticking along quite nicely."*

This would suggest that the initial period of HLS, is seen as challenging, but once the agreement is established, its implementation become more manageable. Hence advice and support is particularly important in the early period, as this will shape future management.

5.2.2.2 NE adviser and 3rd party perspective on HLS agreement development and implementation

In this section consideration is be given to the responses from the interviews with NE advisers. As indicated earlier, these were undertaken after the agreement holder interviews and with the current NE advisers. In most cases, the NE adviser interviewed was not the one who set up the agreement and was not always able to respond to questions referring to this period. Where a contact was secured, some NE advisers involved with the agreement at an early stage were interviewed in order to gather as complete a picture as possible of the HLS agreement.

The NE advisers were asked a series of questions about the agreement holder's understanding of HLS, their capacity to deliver, and the role of advice and support in securing the best possible environmental outcomes.

The earlier questions concerned the development of the agreement, including who initiated the application to HLS for the holding. Of the 98 NE advisers, 75 were able to provide an answer (Figure 36).

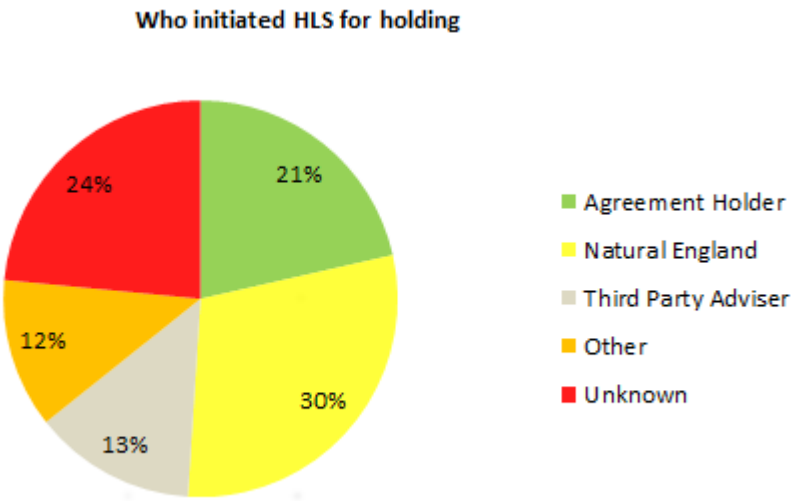


Figure 36 NE adviser view of who initiated HLS application

Accepting that in almost a quarter of cases the NE adviser did not know who had initiated the agreement, the largest proportion had, in the view of the current NE adviser, been initiated by NE themselves. These were likely to be SSSIs and/or follow-on agreements from previous AES agreements. The agreement holder themselves initiated a fifth (21%) of the agreements. Third party advisers, such as the Wildlife Trusts (as part of a Living Landscape project), developed 13% of the agreements

The NE advisers were then asked questions about the agreement holders' knowledge and willingness to join the scheme, with responses on a 5 point scale ranging from 'very positive' to 'very negative' with a neutral mid-point. Subsequent pie charts are based on usable responses, with the number of usable responses listed.

When the NE advisers were asked how willing the agreement holder was to enter into HLS, usable responses were received from 71 of the 98 NE advisers (72%) (Figure 37).

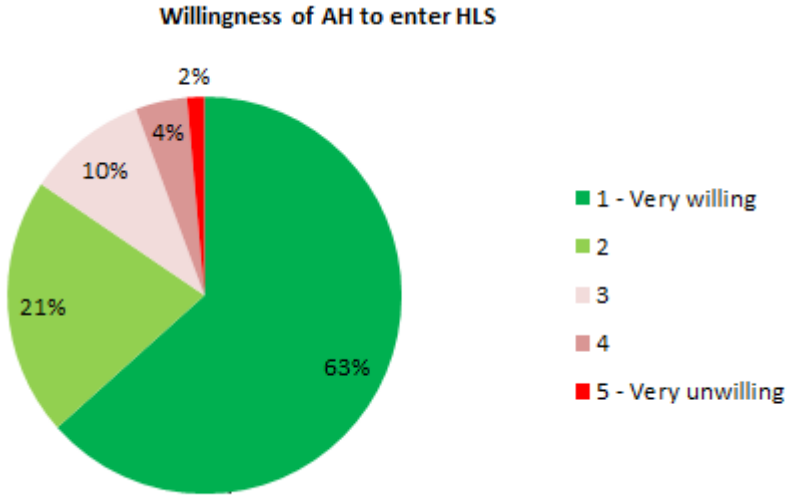


Figure 37 NE advisers view of agreement holder willingness to enter HLS

In most cases, NE advisers considered that agreement holders were willing (21%) or very willing (63%) to enter into HLS. In only six per cent of cases was the agreement holder considered to be unwilling. However in just over a quarter of cases the answer to this question was not known, probably because of changes in project adviser personnel.

In a further question, the knowledge of agreement holders at the start of the agreement was assessed by the NE advisers. Just over a third (37%) were not able to answer this question as they were not involved at this stage. The results are shown in Figure 38.

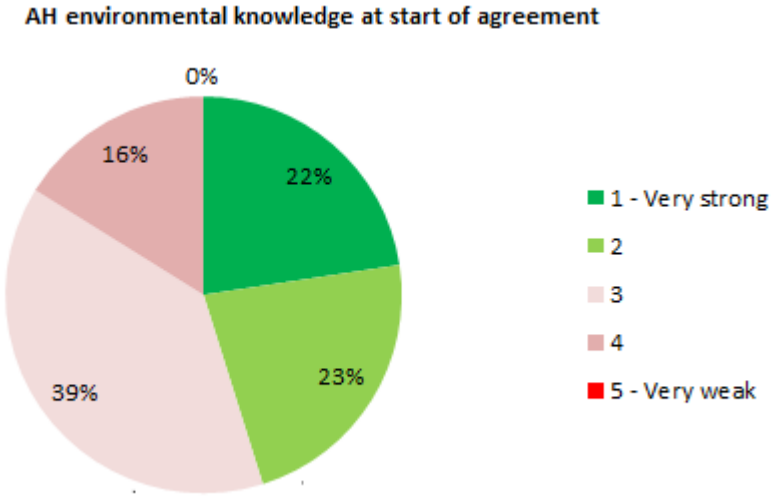


Figure 38 NE adviser view of agreement holder knowledge at start of HLS

Only 22% of agreement holders were considered by the NE advisers to have 'very strong' environmental knowledge at the start of the HLS agreement. A similar proportion (23%) suggested it was strong, giving a combined response of 45% for both categories. The largest group (39%) fell in the neutral category with only 16% thought to be 'weak' and none in the 'very weak' category.

A much higher proportion (88 out of 98, or 90%) replied to the question on the role of advice and support in the success of the HLS agreement (Figure 39).

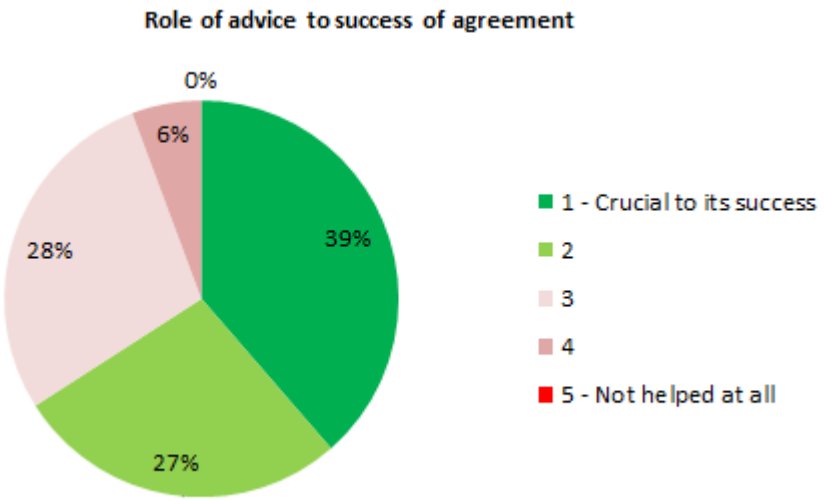


Figure 39 NE adviser view of the role advice and support in agreement success

Over a third (39%) suggested that the advice and support had been crucial to the success of the HLS agreement, and a further 27% considered it to be important to the success of the agreement. In none of the cases was it thought to be 'no help at all'. Where the response was neutral, the agreement holder might have been an environmental NGO, where NE might reasonably to assume that advice and support was less important. However, in most cases (66%) the NE advisers saw the provision of advice and support as being either crucial or important.

A constant theme within the agreement holder interviews was the change in NE staff and the previous section has included a number of comments suggesting that this has had an impact on the level of engagement with the NE adviser. Therefore within the NE adviser questionnaire a group of questions at the start sort to determine the amount of change and possible impact that this might have had on the selected agreement holders.

The NE advisers were asked to quantify the number of changes in the NE personnel over the course of the agreement. The results show that in only 24% of cases (23 out of 98) had the NE adviser not changed. In nearly half of cases (48%) there had been one change. In nearly a fifth of cases (19%) there had been between three and four changes and in four cases there had been five or more advisers, meaning four or more changes during the course of the agreement. To present this another way, across the 98 agreements there had been 109 changes in NE adviser, spread across an average of 7 years, this is 16 changes each year on average in a group of 98 agreements, i.e. 17% of agreements changing their NE adviser per year. The reasons for this included internal changes, leaving the post, retirement, or changes in regional boundaries. In many cases there was an official handover, but it was clear from the NE adviser comments that this was not always possible. In some cases the NE adviser indicated that they 'received a list' of their new agreements and essentially started from scratch. Some of the current NE advisers had also not visited the site and had only spoken to the agreement holder on the telephone or by email. The comments from the NE advisers gave a clear indication that they would like to visit agreement holders but the reality was that this was not always possible. They know that this kind of support is beneficial but realise that it is also a real cost.

Further questions to the NE advisers covered their views on the agreement holders' capacity to undertake the work, their level of understanding of what was required and how well they had implemented the advice. In terms of capacity, the question was answered by 82% of NE advisers. In all 80% of the NE advisers felt that the agreement holders had high or medium capacity to deliver the work (categories 1 or 2) with only 5 suggesting that the capacity was low. A similar response was also received for the question on implementation of the advice and support received.

For the question on understanding the advice given, 79% were able to supply a usable response (Figure 40).

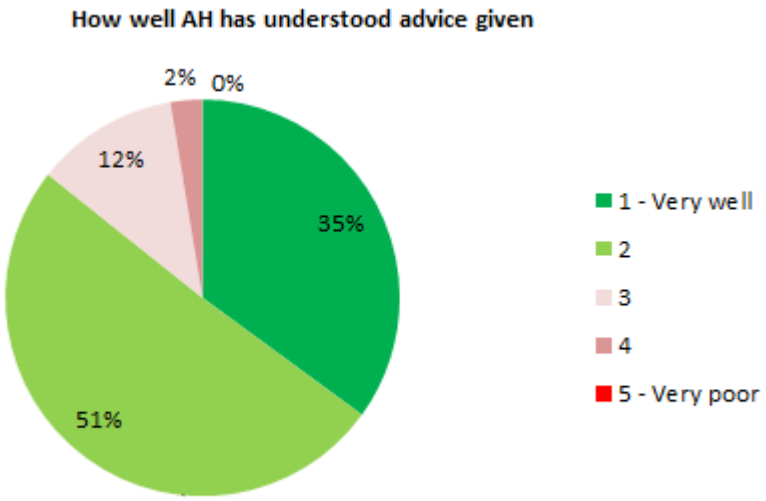


Figure 40 NE adviser views on agreement holder understanding of advice and support

The number indicating that the agreement holder understood the advice 'very well' is lower than for implementation and capacity, at 35%, compared to 46% and 41% for capacity and implementation respectively. More fell into the next category (51%) meaning that over 80% understood the advice either very well or fairly well. In none of the cases was the understanding thought to be very poor and in only 2 cases was it poor.

The final set of questions referred to the outcomes of the HLS agreement. The first of these assessed how well the agreement holder understood the agreement outcomes. This was answered by 84% of the NE advisers (**Error! Reference source not found.**).

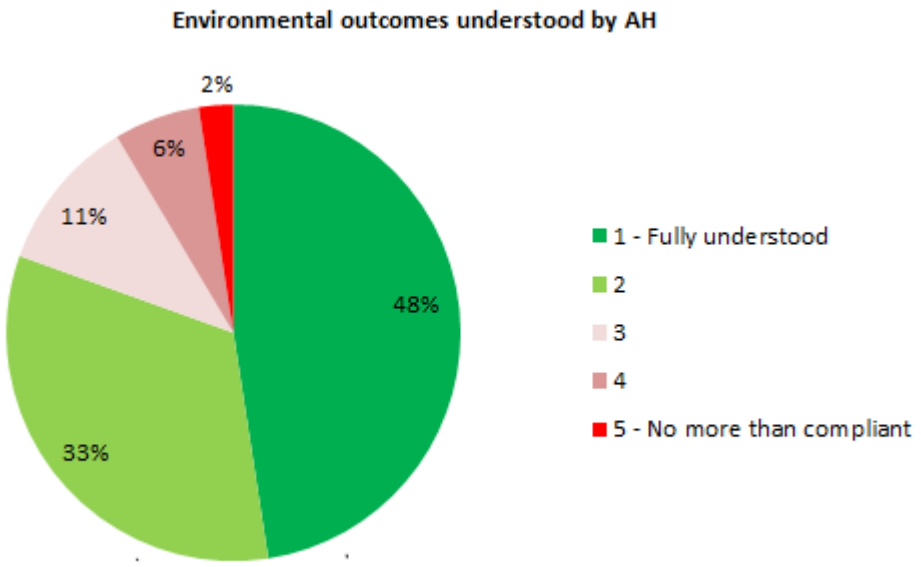


Figure 41 NE adviser views of agreement holder understanding of outcomes

The results show that in 48% of cases, NE advisers felt that the agreement holder 'fully understood' the environmental outcomes that the HLS agreement is looking for. If you add the next category 'understood' (33%) then 81% were considered to have a good grasp of the environmental outcomes. This leaves 19% who the NE advisers did not consider to have a good understanding of the outcomes expected in the HLS agreement.

5.3 Discussion of agreement holder attitudes to advice and support provision

The advice and support given to the agreement holders is often associated with options, and the interview with agreement holders was an important opportunity to determine their views regarding HLS options. Agreement holders felt that the options they had signed up to within their agreements would be effective. This was slightly less likely with arable options but overall there was a high level of consistency. It is possible that the loss of productive arable land to HLS leads to some concern among agreement holders that they will need to be particularly effective in order to make up for the impact of 'land sparing'.

Agreement holders' understanding of the link between management and option outcome was strong. They were more aware of the habitats and features on their holding that were being managed under the HLS agreement as a result of the agreement. They were also clear in over three quarters of cases that the advice and support received meant that they knew what was required of them. This was consistent across all of the habitat types.

With levels of awareness increased as a result of the advice and support provided, it is a surprise to see the lower level of endorsement for the Indicators of Success. While still at 60%, the 40% who say that these are 'not clear' or 'not at all clear' suggests that this area needs attention. Grassland options were the only options to score under 40% for 'very clear' and 20% felt the IoS were not 'clear' or 'not at all clear'. Here concerns relating to 'land sharing' may be involved, as the management covered in the IoS would be implemented alongside the productive management.

Notwithstanding this, close to 80% of agreement holders understand what is required of them, saying that the advice and support provided is very clear or clear. The fit of the advice and support received with current management was good or very good in over 80% of cases. The advice and support was also generally seen as practical, although to a slightly lower level. Only a few considered that it was not practical. The costs were largely seen as appropriate when compared to the payment received. As a result, nearly all of the agreement holders interviewed felt able to deliver the HLS agreement.

Over half of agreement holders (57%) said they 'occasionally' looked at their agreement documentation. Nearly a quarter (23%) said they consulted their agreement documentation on a regular basis Twenty percent said they looked at their documentation hardly at all. The message to take away from this is that the agreement documentation is a reference document rather than a day-to-day management guide, and this has important inferences for the presentation and format of future documentation.

A good proportion (66%) of agreement holders did find the agreement complex, but most still considered it to be manageable. Encouragingly, those who found it very complex did at least look at the documentation occasionally or regularly. This is reassuring as in most cases the HLS management has required a change from current management and in a third of cases differs from what happened under previous AES management. The interviewer assessment suggests that nearly 80% are at least fairly knowledgeable if not very knowledgeable in their understanding of the options. Across all of the options 35% had a high level, and 44% had a medium level of understanding. This leaves a fifth with a low level of understanding. This is the same proportion as in the LM0433 project that looked at new agreements. The level of understanding is slightly lower in grassland options than for arable and woodland ones. Again this might be due to the difficulties of managing land for the environment and as a productive enterprise at the same time. Where stocking rates or cutting times are set by the agreement, they might be at odds with well-established farming practices.

Agreement holders felt that they had achieved half of the HLS objectives and partially achieved 45%, leaving just 4% that, in their view, had not been achieved. When combined together, a third (30%) felt that they had achieved all of their HLS objectives, 39% some of them and another 31% felt they had not fully achieved any of the HLS objectives. These observations by the agreement holder were largely confirmed by the NE advisers. In some cases the NE advisers felt that the agreement holders had been a little harsh on themselves or had not really provided enough detail.

The agreement holders confirmed that 39% of agreements in the sample had changed during the five years or so of the agreement. Some of this was due to additional items or because the ownership of the land had changed. Two thirds of agreement holders (65%) reported that they had received additional advice after the signing of the agreement. Mostly this came from their NE adviser, but also occasionally from an independent adviser. In most cases the additional advice seems to have been provided over the phone or by email but in some cases there was a site visit. It is not possible to ascertain if this was a formal change requiring a re-printing of the agreement or a more informal intervention. However these two points indicate the agreement holders are aware of the impact of changes and the need to seek advice even after the agreement is signed.

Changes in understanding and attitude are difficult to attribute but the signs are that on the whole the agreement holders were more confident and aware at the time of the interview than at the start of the agreement, and they generally appeared to find the agreement itself less difficult to understand and implement. This was confirmed by the agreement holders themselves in the interview and also by the NE advisers. In the agreement holder survey, the proportion of agreement holders finding the HLS agreement 'very challenging' went from 33% at the start to 13% when over 5 years into the agreement with all of the 20% who changed their view now considering the agreement 'reasonable'. The NE advisers felt that only just over a quarter of the agreement holders had a very strong or strong environmental knowledge at the start of the agreement. They considered that advice and support was therefore very important to help the agreement holders understand what is required of them.

The high level of turnover in NE advisers was noteworthy, with only a quarter of cases experiencing no change of adviser . Just under half had a single change of NE adviser, with a further 23% having at least three NE advisers during their agreement thus far and four cases having had four or more changes. This was recognised by the NE advisers as having an impact on the HLS agreements, especially the more complex and innovative ones. On average, over a fifth of agreements experienced a change every year over five to six years.

The analysis suggests that the advice provided is valued and seen as high quality and has had a strong influence on the agreement holders' awareness and the required management of the land and features concerned. The outcomes of these interventions are important to the agreement holders. With two-thirds becoming more aware of the land management or feature as a result of the advice this should be seen as a very positive result. Moreover the NE advisers have largely confirmed the agreement holder's assessment of the HLS agreement and the role of advice and support in securing the agreement outcomes.

6 EVALUATION OF RELATIONSHIPS BETWEEN ADVICE AND SUPPORT PROVIDED TO HLS AGREEMENT HOLDERS AND ACHIEVEMENT OF OUTCOMES

6.1 Overview

This section is an agreement-level assessment to evaluate the relationship between the input of advice and support and progress towards or achievement of agreement outcomes, covering:

- the likelihood of achievement of agreement objectives, based on field observations;
- the role of the agreement holder in securing intended agreement outcomes; and
- the impact of quality of the advice and support provided on securing intended agreement outcomes.

The evaluation tests the relationship between input components of agreement set-up and management (from interviews with agreement holders and advisers) and outcomes, as evidenced by the field survey assessment. This draws on the data and analysis from Chapters 4 and 5 and considers the high-level evidence of a correlation between inputs and outcomes.

The methodology used relies on scores being available for the key parameters. It was necessary to secure these from AH interviews, adviser interviews and from the fieldwork.

At the end of the AH interviews, interviewers were asked to score a range of parameters relating to the agreement holder and to the input of advice and support. While these were based on information received during the interview, they are overview indicators and reflect the interviewer's judgement rather than that of the AH. As such there is coherence with the analysis in section 5 but it is not possible to link responses to individual questions directly to parameter scores. Scores were provided for each agreement by the research team, covering the following:

- AH characteristics (engagement, knowledge and capacity)
- Need for advice/influence of advice
- Advice and support input (quality/quantity/timeliness etc.)
- Relationships with advisers
- Other influencing factors – e.g. external events, weather etc.

Analysis of the full interview responses provides a wider context in order to unpick and interpret the scores in terms of the impact of advice and support on the agreement set-up (and likely environmental outcomes ultimately).

Interviews undertaken with advisers provided another perspective on both the understanding of the AH and the role of advice, and help interpret the complex of influencing factors. Again, overview scores were provided by the interviewers to use in the correlation analysis. However, given the limited number of agreements with a third party adviser, only the NE adviser interviews were used in the correlation analysis.

Data gathered from the site visits provided scores for appropriateness of option selection, Indicator of Success (IoS) type and level and management prescriptions (MPs). In addition to these indicators for agreement set up, two further indicators for the actual delivery of the

outcomes are used, namely MP being followed and achievement of IoS. As outlined in section **Error! Reference source not found.**, a three-point scoring scale was used for the field survey work.

6.2 Indicator Metrics for agreements

For each agreement/option, evaluation scores were given to the following input (farmer characteristics, need for advice, advice and support input, and relationship with advisers) and output (agreement establishment and delivery of outcomes) indicators. These are described below for input and outcome indicators.

6.2.1 Input indicators

Agreement holder (AH) characteristics are represented by a range of indicators (scored on a 1-5 scale), using the average score of the following:

- AH ownership of decision to enter agreement
- AH influence on selection and placement of agreement options
- AH knowledge of agreement objectives and IoS
- AH commitment to agreement objectives
- AH capacity to deliver agreement objectives
- AH perspective on agreement success

Advice input reflects overall advice and support provision and is also a composite indicator (scored on a 1-5 scale), using the average score of the following:

- Quantity of advice and support received
- Quality of advice and support received
- Timeliness of advice and support received
- Consistency of advice and support

Need for advice is also an input indicator, and is used to reflect scale of change or the complexity of management. Complexity of management is an indicator on its own, based simply on the number of options in an agreement plus the total number of capital items rather than the extent to which they are easy or difficult to deliver. It also informs our understanding of other driving factors for the delivery of objectives.

Relationships with advisers is also an input indicator, on the basis that this can affect the level and effectiveness of advice and support. As a number of farmers interviewed did not use third party advisers, relationships with advisers were represented by the self-assessment scores given to the relationship with NE advisers only.

An additional indicator, complexity of the agreement, was then added to inform understanding of other driving factors for the delivery of objectives. This indicator is represented by the total number of options for each agreement plus the total number of capital items.

6.2.2 Output indicators

For the agreement establishment, four indicators were used and scored for all options on each agreement (on a three point scale 0-1-2).

- Has an appropriate option been applied

- Are the IoS of an appropriate type?
- Are the IoS set at an appropriate level?
- Are the MPs appropriate?

The average score across all options for each agreement was used as the indicator of agreement establishment at the agreement level.

For the delivery of objectives, two indicators were used and scored.

- Have the IoS been achieved (on a three point scale 0-1-2)
- Are the MPs being followed (on a two point scale 0-1)

Again, the average score of all options for each agreement was used as an indication of the delivery of outcomes at the agreement level.

The agreement-level score is a combination of multiple FEP codes/options and for each option there may be multiple IoS. The number of features assessed, number of FEP codes, and number of measureable IoS varies by agreement but are treated with equal weight.

6.3 Correlation analysis

The relationship between input and output/outcome indicators were tested using Spearman's rank correlation, which is the non-parametric equivalent of the Pearson correlation and appropriate for ranked ordinal data. The following matrix (Table 25) illustrates the correlations tested between each pair of input/output indicators.

Table 25 Matrix of correlations tested

Input Indicators	**Indicators for agreement establishment**				**Indicators for the delivery of outcomes**	
	IoS type	IoS level	Appropriate MP	Appropriate option	IoS Achieved	MP followed
AH characteristics	X	X	X	X	X	X
Need for advice	X	X	X	X	X	X
Advice input	X	X	X	X	X	X
Relationship with NE advisers	X	X	X	X	X	X
Complexity of agreement	X	X	X	X	X	X

Coefficients of correlations between each pair were calculated and their statistical significance tested. Data have been plotted in graphical form and outliers investigated to understand the reasons for departure from general trends.

The focus of the evaluation was to understand the relationships between farmers' characteristics, advice and agreement establishment. A matrix of the scores was used to run a Spearman's Rank Correlation analysis to test for significant relationships. The main hypotheses examined were:

H1. The understanding and commitment of the AH will materially affect agreement set up and outcomes

H2. The appropriateness, quality and timing of advice and support input to establishing an HLS agreement will materially affect agreement set up and outcomes

H3. The complexity of an HLS agreement will materially affect agreement set up and outcomes

H4 The appropriate establishment of agreements will increase the likelihood of a successful agreement outcome.

6.4 Results

6.4.1 Agreement level assessment

In total, data on 80 agreements[17] were evaluated to measure statistical dependence between inputs and the establishment of the agreement and outcomes. The results from the Spearman's correlation analysis are shown in Table 26, where coefficients of correlations between each pair of input/output variables are presented along with their p-values (in brackets). No significant correlations were found between AH characteristics or advice input and agreement set-up or outcome indicators. However, the results show that complexity of the agreement is negatively correlated with the adoption of appropriate options (Spearman's coefficient rho=-0.2303, p=0.0399) and whether the MP is being followed (rho=-0.3596, p=0.0011). Furthermore, complexity of the agreement negatively affected the delivery of outcome. The Spearman's coefficient is -0.2804 (p=0.0118) between complexity of the agreement and the delivery of outcomes.

Table 26 Spearman's rank correlation coefficient for inputs to set up agreements and key outcomes (values in bold type are significant at P=0.05 or less)

	IoS type	IoS level	Appropriate MP	Appropriate option	IoS Achieved	MP followed
Knowledge of agreement objectives/IoS	-0.2589 (0.0204)	-0.2005 (0.0746)	-0.0024 (0.9829)	0.0234 (0.8365)	-0.1046 (0.3559)	-0.1195 (0.2911)
Need for advice	-0.0667 (0.5566)	-0.1536 (0.1737)	-0.0436 (0.7010)	-0.1638 (0.1466)	-0.0024 (0.9832)	-0.0852 (0.4527)
Advice input	-0.0434 (0.7024)	0.0822 (0.4686)	0.0776 (0.4941)	0.1330 (0.2396)	-0.0040 (0.9721)	-0.0558 (0.6230)
Relationship with NE advisers	-0.1108 (0.3277)	-0.0115 (0.9190)	0.0163 (0.8857)	0.0962 (0.3957)	-0.0849 (0.4539)	-0.0945 (0.4046)
Complexity of agreement	-0.1623 (0.1504)	-0.0043 (0.9699)	-0.0654 (0.5643)	**-0.2303*** **(0.0399)**	-0.1933 (0.0857)	**-0.3596*** **(0.0011)**

[17] Around 20 records were excluded from this assessment where there were missing values or the outcomes were greatly influenced by 'other external factors' (e.g. weather, flooding etc).

* Significant at 95% confidence level

The absence of correlation between many of the input and outcome indicators is largely due to a concentration of relatively high scores for both input and outcome indicators. Figure 42 suggests that the outcome scores (a composite of 'IoS has been achieved' and 'MP being followed') are concentrated between 1.5 and 2.0 (the maximum value) (73% of the agreements).

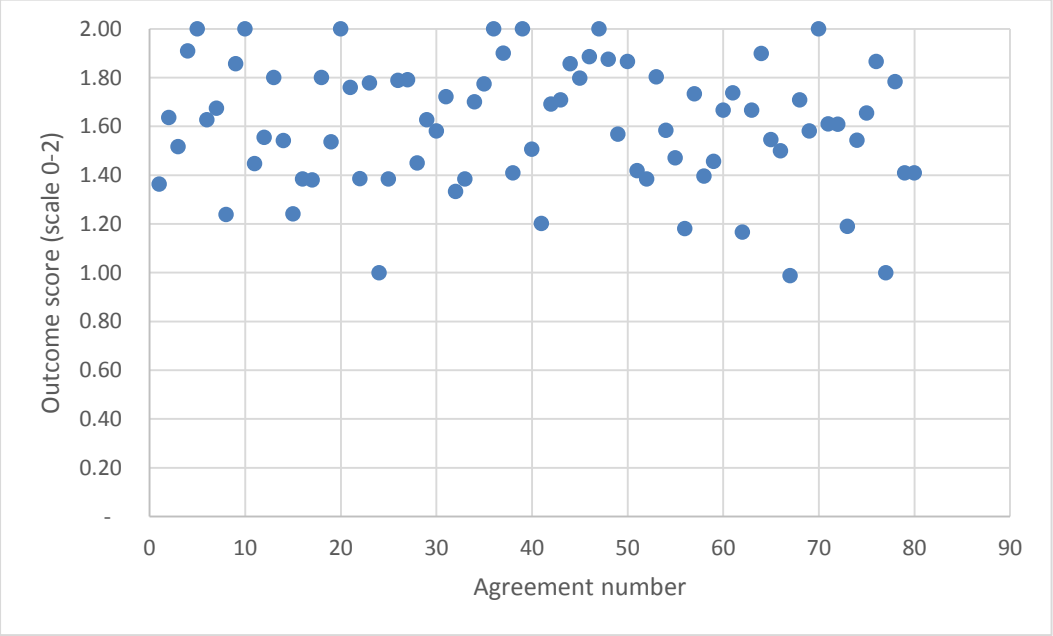


Figure 42 Composite outcome score for agreements

The following charts illustrate the distribution of scores provided by the interviewers for AH characteristics and AH perceptions of advice input.

Figure 43 shows that the majority (60-70%) of agreement holders scored 3 or above (on a scale of 1-5) across a range of AH characteristics.

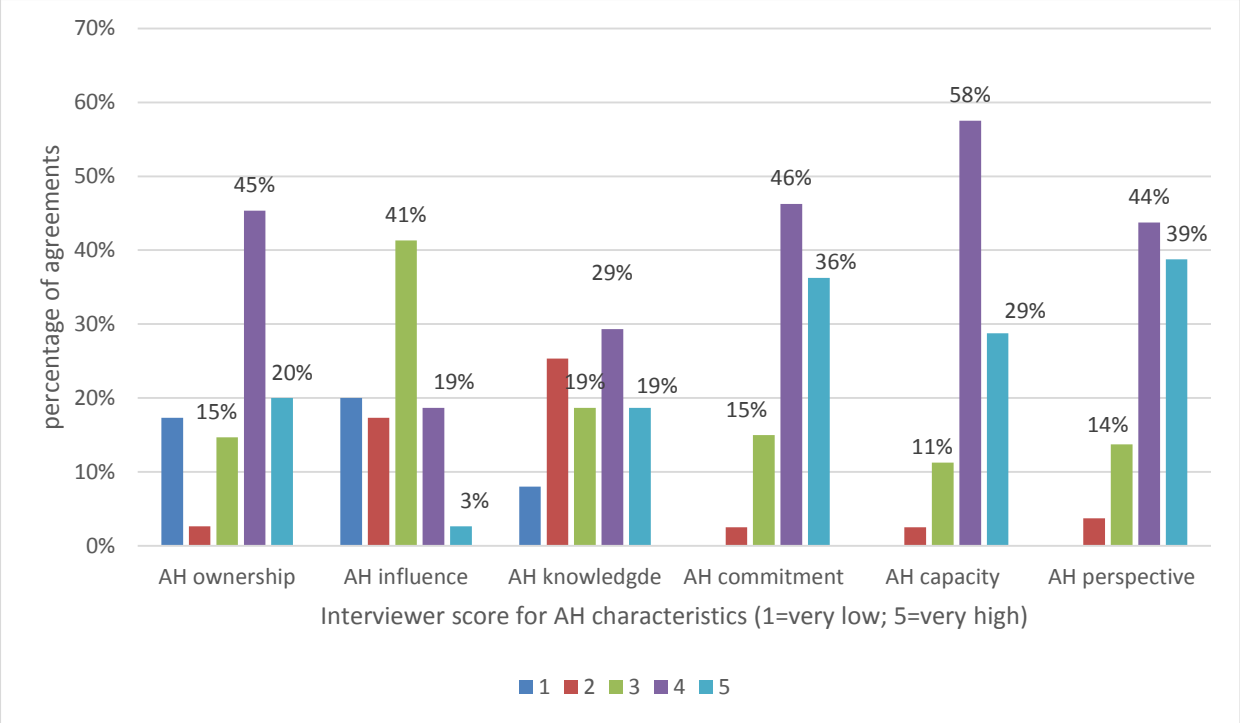


Figure 43 Distribution of AH characteristics by score

Similarly for advice input, Figure 44 suggests that this is also concentrated at higher scores with the majority (over 85%) scored at 3 and above.

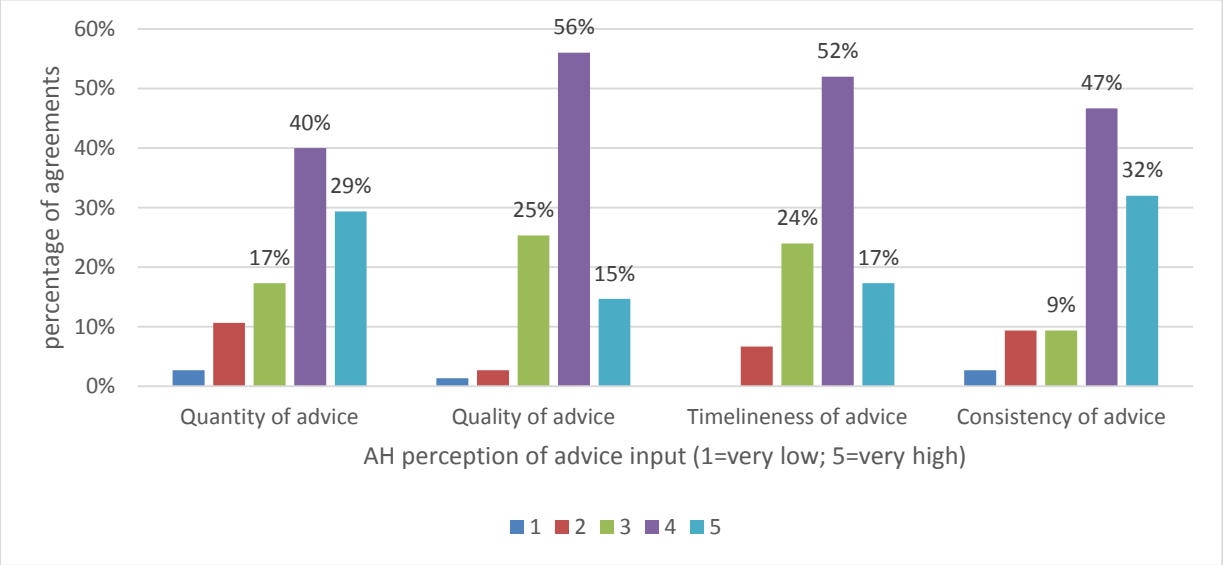


Figure 44 Distribution of AH perceptions of advice input

The correlation analysis of the adviser interview data against the interaction between AH characteristics, advice and support input and scheme outcomes is similarly limited by clustering of scores within the sample data (see distribution of scores in Figure 42).

Figure 45 shows the NE adviser assessment of the AH capacity and understanding, the success of the agreement to date, the role of advice and support and confidence that intended outcomes will be achieved.

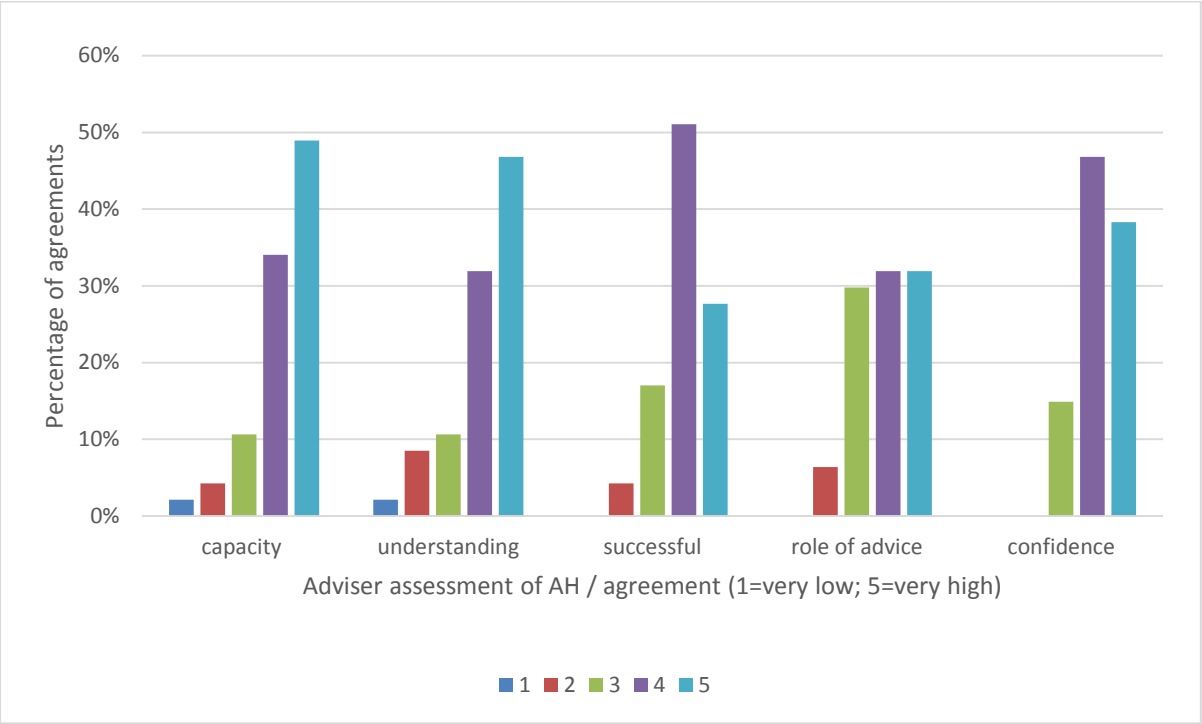


Figure 45 Distribution of NE adviser assessment of AH and agreement

In the absence of clear evidence of correlations between AH or advice input and agreement quality, the relationship between agreement establishment and the outcomes was also examined. A positive correlation was found between the quality of the agreement set up and outcomes (Spearman's coefficient=0.4029, p=0.0002). This suggests that good establishment of agreement is an important indicator of agreement outcomes.

Given that no correlations were found in the vast majority of paired input/outcome indicators using Spearman's rank correlation, a few cases were selected in order to better understand the reason for low outcome agreements and how good agreement outcomes were still secured in some instances. The cases were selected from the matrix in Table 27as follows:

i. Low outcome scores (3 cases)

ii. A counterintuitive association between input and outcomes scores i.e. low AH knowledge of agreement objectives and IoS but high outcome score (6 cases).

Table 27 Matrix of scores for AH knowledge and agreement outcome

	Outcome score			
AH knowledge of agreement objectives and IoS	**LOWER**	**MID**	**HIGHER**	**Total cases**
Scores 1&2	1	22	6	29
Score 3	2	11	13	26
Scores 4&5	0	18	7	25
Total cases	**3**	**51**	**26**	**80**

In the low knowledge/low outcomes cases, two of the three appear to be fairly disengaged. They do not refer to the agreement documentation often and do not agree with the MPs. Support in these situations might have been influential and it could be that these agreements were identified as low priority (none have a designated site or seem to have been in an agreement before) or low risk (simple agreements or maintenance only options). A further possibility is that they have had an adviser change and have not been visited or supported.

Where low AH knowledge is not associated with low outcome scores, there are multiple factors which influence agreement set-up and the complexity of their interaction. From the qualitative analysis of the cases we find that 6 out of 7 of the low understanding/high outcomes are classic agreement holders who have renewed into HLS. As there is little change in the farming systems for these agreement holders, the IoS can be delivered by continuation of the same management undertaken under the classic schemes even though the MPs are not closely followed. These farming systems are fairly stable and present a low risk to the environment. When asked about their plans, again 6 out of 7 of these farmers indicated that they have no plans to do anything different for the next 5 years.

We also considered the possibility that the correlation analysis was not only limited by clustering of indicator scores but that by using composite scores for all options within an agreement, issues of 'option difficulty' were being masked. To test this possibility we removed those agreements with easy to manage options only from the sample, leaving those agreements with at least some more difficult to manage options[18] and ran the correlation analysis again for these 69 agreements. The results were similar to those for the whole sample and no significant correlations were found between AH or advice input and the agreement outcomes.

We then looked at the two-way relationship between AH knowledge and outcome score in this sub-sample of agreements and found the following:

- AH knowledge of agreement objectives and IoS tends to be higher in the high outcome score group than that in low outcome score group (although the scores were again concentrated towards the high end with only six agreements in the low outcome score group).
- In terms of advice input and agreement outcomes, there are no apparent relationships shown.
- The relationship between advice input and agreement set-up score (appropriate option, IoS and MPs) seems to suggest a negative relationship i.e. the group with low set-up scores tend to have higher advice input scores. However, this should be treated with caution as there are only very small number of cases in the low set up score group (n=4).

Overall, the analysis suggests that the AH characteristics (AH knowledge especially) is relatively important in the success of delivering agreement outcomes. The relationship between advice input and agreement set up or outcome is less clear.

[18] 'Difficult to manage' options were defined as being those which involved creation or restoration of a habitat (e.g. creation of wet grassland for breeding waders), a change in farm management (e.g. arable reversion or sowing part of a field with a specific crop) plus all of the supplements.

We also looked in more detail at the four cases where the set up scores were low and the six cases where the outcome scores were low, to try to understand why and how the high advice input does not reflect in the agreement outcomes or agreement set up. The evidence from these case studies (4 plus 6) suggest the following:

a. **AH characteristics are important**: In particular AH knowledge of agreement objectives and IoS is important to deliver agreement outcomes: If the agreement is poorly set up but the AH understands the objectives of their scheme, how to deliver them and the outcomes are appropriate, the agreement outcomes may still be delivered. However, if the agreement is well set up (including outcomes) but the agreement holder lacks knowledge or capacity to deliver, achievement of outcomes is hampered.

b. **Agreement set-up is important**: Regardless of the knowledge and capacity of the agreement holder, if the agreement outcomes are inappropriately defined or incorrect the opportunity to deliver is severely compromised. This reinforces the finding from the Spearman correlation analysis, where a positive correlation was found between the quality of the agreement set up and outcomes (Spearman's coefficient=0.4029, p=0.0002) and suggests that establishment of agreements should be a priority in delivering agreement outcomes.

In view of the apparent importance of AH knowledge in influencing outcomes, average scores were calculated for the key farm types to see whether there were any apparent differences between farm types. The resulting scores were all within a fairly narrow range and present no clear insights (Table 28).

Table 28 Average scores for AH knowledge and outcomes in relation to farm type

	AH knowledge	Score for outcomes
Lowland beef & sheep	2.53	1.67
Upland beef & sheep	2.19	1.69
Mainly dairy	3.00	1.45
Mainly arable	2.96	1.53

6.5 Discussion of evaluation of relationship between and support and achievement of agreement outcomes.

The evaluation results do not show any strong correlations between input indicators from the AH interviews (AH characteristics, need for advice, advice input, relationship with advisers) and agreement outcomes (from the site visits). The absence of statistical correlation largely relates to concentration of scores towards high end of the scale for both input and output indicators. This means that the ranking of individual scores is not reliable and that the correlation analysis is of limited value. It does not tell us that there are no relationships between the compared variables.

While it may have been possible to improve the robustness of the ranking by, for example, using an extended scoring scale for the field survey, this was deemed to be inappropriate for the purpose and would not have been reliable. In practice, both the interviews and field survey scores were composites of a number of indicators. For example, the 'AH characteristics' is based on scores for 6 component indicators, while outcome scores are based on 2 indicators across multiple options which were scored individually within an agreement. As such the effective scale was much more continuous and delineated than the 1-5 or 1-3 scoring scale for each indicator. Importantly, the analysis has shown that the main issue which has confounded the correlation analysis is the multi-factorial nature of the drivers for outcomes, namely the AH, advice, site, complexity of agreement and agreement set-up. For this reason, the qualitative analysis of agreements with for example low outcome scores was often more insightful than the formal correlation analysis.

We did find a weak negative correlation between AH knowledge and the appropriateness of the IoS type selected (Spearman's coefficient=-0.26, p=0.02) but further investigation suggests that this reflects more complex agreements rather than an indication that knowledge is a negative influence on establishment. As such, we extended the correlation analysis to consider an additional indicator, namely the 'complexity' of the agreement, based on count of different options eligible for selection (main HLS plus supplements, but not ELS/more of the same) plus count of capital items. The Spearman's ranking analysis suggests that complexity of agreement is negatively correlated with both agreement set up (Spearman's coefficient between complexity and appropriateness of options =-0.23, p=0.03) and outcomes (Spearman's coefficient between complexity and outcome score=-0.28, p=0.01; Spearman's coefficient between complexity and MPs followed=-0.36, p=0.001).

A more in-depth examination of nine cases where the outcome scores were low or where outcomes were high but AH knowledge of objectives and IoS was low suggests that engagement of agreement holders is important to deliver good agreement outcomes. Evidence also suggests that the scale of change (in management or farming systems) is also key. Some farmers moving from classic schemes to HLS with low knowledge are still delivering good agreement outcomes due to the limited change required.

An interesting point arising from the case studies is that the AHs do not always know if they need advice as there isn't any incentive for them to seek it out and without monitoring or evaluation, this would be missed. Although some farmers prefer "lack of interference" from advisers, there should be a system to help farmers identify their need for advice.

7 GENERAL DISCUSSION AND CONCLUSIONS

This discussion is structured to provide an overview of the results in relation to the project objectives, with particular emphasis on areas where improvements to the implementation of the scheme/delivery processes might be achieved. Where recommendations are made with respect to areas with scope for improvement, these are inserted in italics after discussion of the topic concerned. A summary of recommendations is presented at the end of the discussion.

7.1 Project objectives 1 and 2

1: to assess progress towards the achievement of intended HLS agreement outcomes, including the assessment of feature condition in relation to agreement Indicators of Success

2: to assess observed results of management in relation to agreement management prescriptions,

These two objectives are considered together, as there are interactions between them. The relative impacts of agreement set-up and implementation of management prescriptions in the achievement of objectives are of particular interest.

Inevitably, much of the focus of this project is on scope for improvement, but before considering where improvements could be made in future, either for the delivery of HLS or in designing the way the new CS is implemented, it is important to assess how well Higher Level Stewardship has performed overall. The answer appears to be that in general, for most of the metrics examined by this project, performance has been good in the majority of cases. To put this result in context, the agreement holder interviews indicated that only 14% of options would have been managed in a similar way in the absence of the scheme[19]. This shows a high level of additionality in HLS, compared for example to Entry Level Stewardship, where agreement holders indicated that 61% of features in options would have been managed in a similar way in the absence of the scheme (Boatman *et al*., 2013).

While the high level of additionality is encouraging, it also indicates that without the scheme, the majority of the managed features would be managed differently, and therefore potentially at risk. The implications are that without the scheme, habitats would either suffer from lack of management or management would change in a way likely to be detrimental to the environmental interest. This raises important issues relating to continuity of funding; if this cannot be assured, environmental benefits and gains paid for from the public purse may be lost.

A selection of metrics covering different aspects of agreement set-up and performance are summarised in Table 29 and Table 30.

[19] Cf the recent evaluation of Entry Level Stewardship, where agreement holders indicated that 61% of features in options would have been managed in a similar way in the absence of the scheme (Boatman *et al*., 2013)

Table 29 Summary of agreement performance metrics: agreement set-up

Aspect of agreement	Metric	Number	Total sample	% total sample
FEP codes	No. of incorrect options arising from incorrect FEP codes (red + amber)	10	273	3.6
Option choice	No. agreements with some inappropriate options assessed	26	100	26.0
Option choice	No. inappropriate options across agreements (red + amber)	33	273	2.9
IoS appropriate?	No. inappropriate IoS (red + amber)	124	1279	9.7
IoS level	No. IoS set at inappropriate levels (red + amber)	303	1279	23.7
MPs appropriate?	No. inappropriate MPs	72	2754	2.6

The set-up of an agreement is clearly important; a poorly set-up agreement is likely to have a low chance of success. Only 3% of options were considered inappropriate for the situation in which they were found, however, these affected a significant number of agreements, about a quarter of the total. Only 10% of IoS were considered inappropriate, but nearly a quarter of IoS were thought to have been set at ambitious or otherwise inappropriate levels. Only 3% of management prescriptions were considered inappropriate.

Although the majority of cases were satisfactory, there is clearly scope for improvement in view of the importance of this stage. Of particular concern are the proportion of agreements with at least one inappropriate option (out of those assessed), and the proportion of IoS set at inappropriate levels.

Table 30 Summary of agreement performance metrics: agreement progress

Aspect of agreement	Metric	Number	Total sample	% total sample
IoS achievement	No agreements with all IoS achieved or on target	29	98	30.0
IoS achievement	No IoS not achieved or on target	223	1079	20.7
MP implementation	No. MPs not being followed correctly	192	1744	11.0
Capital items	No CIs not completed	55	196	28.1
Capital items	No CIs not completed to high level	21	140	15.0

Although nearly 80% of IoS were achieved or on target, the 21% that were not on target were spread over a large number of agreements, so that all IoS were achieved or on target for only 29% of agreements. The great majority of MPs were being implemented correctly, but the record for capital items was not so good, with only 28% complete by the deadline and of these, 21% has been completed only to a poor or 'adequate' standard.

Of IoS that were not likely to be achieved, 26% were considered to be of an inappropriate type for the option or parcel concerned, and 51% were considered to be set at an

inappropriate level. In contrast, in only 41% of cases where IoS were unlikely to be achieved, did surveyors indicate that management prescriptions were not being followed. Furthermore, only 10% of appropriate MPs were not followed, compared to 43% of inappropriate MPs. These included some 'mandatory' MPs which NE advisers are required to include, but they may be clearly inappropriate to the parcel concerned and therefore ignored by the AH. This highlights the vital importance of correct set-up of the agreement. Incorrect set-up appears to account for more instances of IoS non-achievement than does failure to implement MPs by the agreement holder.[20]

IoS vary in their importance; for some IoS, failing to achieve them may not have a very significant impact on option outcomes as a whole, whereas for other IoS it definitely would. However, this begs the question as to why IoS are set that are not important to the achievement of the objective? A clear statement of objectives for each agreement and option would aid the setting of IoS linked to those objectives, which would be more likely therefore to provide a satisfactory measure of whether the objective was being achieved.

Recommendation 1. Agreement set-up: choice of options, IoS and MPs

This project has demonstrated the need for the right choice of options, IoS and MPs. NE Delivery processes need to allow for tailoring of IoS and MPs to ensure that they fit the site and advisers need a good knowledge of the site to avoid the errors which result from reliance on inadequate FEP maps. They also need an understanding of the AH and the normal farming practices to ensure that the IoS are achievable and the management prescriptions are practical. In some circumstances, the AH may need to adopt radically different management to achieve the outcomes. It is important that the adviser has the knowledge and confidence to develop a solution that can be negotiated with the AH in a way that leaves both parties clear about the objective, and that the management can and will be delivered. Providing IoS or MPs which don't fit the site, and don't take account of both the capacity of the AH and the starting position of the vegetation, is counter-productive.

Recommendation 2. On-going monitoring and support in relation to capital items

To maximize achievement of option objectives, it is necessary to check that capital items are installed and management prescriptions are implemented, but also to provide the flexibility to adjust them if they are not delivering the expected outcomes.

7.2 Project Objective 3: to gather and analyse information on advice and support provision in order to assess its quality and appropriateness, including information from agreement holders, NE staff and third parties

The discussion in section 5.3 summarises the outcomes of the interviews with the agreement holders and the advisers, and indicates that the advice provided is generally valued, seen as high quality and has had a strong influence on the agreement holders' awareness and the

[20] This also raises the question of whether paying AHs to carry out MPs is the most efficient way of achieving objectives. AHs generally followed MPs, but in poorly set-up agreements this did not necessarily result in achievement of outcomes. An alternative approach is payment by results, which gives the AH more flexibility in management to achieve the outcome desired.

management of the land and features concerned. NE advisers largely confirmed the agreement holder's assessment of the HLS agreement and the role of advice in securing the agreement outcomes. Here we examine some of the areas where scope for improvement was noted.

7.2.1 Agreement set-up: agreement holder documentation and guidance

Agreements are often seen by agreement holders as challenging and complex at the start but this generally eased once they began the work and the interviews suggested that most were running smoothly. The advice at the start of the agreement was seen as vital in establishing the agreements on a sound footing. This was particularly the case for those who are new to HLS or transferring from an ESA to HLS. Those involved with CCS found the change less dramatic.

The majority of agreement holders only occasionally looked at their agreement documentation, and 20% said they looked at their documentation hardly at all. In some cases, this may be because they believed that they knew what needed to be done, but others may have found the documentation difficult to follow.

One area that received a uniform response was Indicators of Success (IoS). Nearly all agreement holders knew of them, but tended not to know the specifics. For instance, with regard to grassland restoration, the agreement holder knew what it was trying to achieve, and knew in general if they were doing well but did not know the percentage coverage of a particular indicator species that was required. The interviews suggest that many agreement holders clearly know what they are doing but they are unable to list the details of the IoS without consulting the agreement documentation.

The interviews also suggest that it not just the content of IoS which influences agreement holders' awareness and understanding but also their presentation and location within the agreement documentation. Consideration should be given to the revision of the Part 3 document so that it is more attuned to agreement holders, particularly commercial farmers.

There appears to be a general lack of clarity about who the IoS are for, and how they are to be used. It may be that two sets are needed, one expressed in more technical form for advisers and another in a form readily comprehended by the agreement holder.

Where an agreement included an SSSI, there was an additional set of monitoring criteria relating to that area, in a separate document which did not form part of the agreement. SSSI documentation was not supplied, and IoS referring to SSSI condition were not assessed as consideration of SSSI condition criteria was not part of this project. This limited to comprehensiveness of the evaluation, but including SSSI condition assessments would have considerably expanded the remit of the project.

Apart from the difficulty in carrying out a comprehensive evaluation, having two sets of monitoring criteria for one parcel is confusing for the agreement holder. It would make more sense to have one set of indicators for each parcel of land in one document, and if there is potential conflict between SSSI and the agri-environment scheme option, this should be confronted and resolved when these criteria are drawn up before the start of the agreement.

Recommendation 3. Agreement set-up: Part 3 documentation

The documentation needs to be written in non-technical language, with concepts and terms clearly defined, and possibly site-specific identification aids.

It would be more meaningful if it presented a vision of the objectives and made clear the techniques by which these objectives are to be achieved

- *For the agreement as a whole*
- *For each option*
- *For each parcel or group of parcels where these have different starting points/outcomes*

It needs to present information in separate sections depending on specificity

- *general IoS which apply to whole agreement*
- *IoS which apply to all parcels within an option*
- *IoS specific to particular parcels*

Recommendation 4: Indicators of Success

IoS should be clear, appropriate and set at sensible levels for the option and parcel in question. They need to be tailored effectively to the circumstances of the actual parcel being managed. It should also be clear who is intended to use them and how, and whose responsibility it is to monitor them. Where change is indicated, baseline data should be collected. If the agreement holder is expected to monitor progress then the IoS should relate to attributes of features or species that are readily recognisable by the agreement holder. One possibility might be to include descriptions of the IoS in a separate booklet so that they are easily accessed.

Consideration should be given to the amalgamation of SSSI assessment criteria with option assessment criteria when the agreement is established so that there is one clear set of indicators of success.

7.2.2 Change in adviser personnel

One of the main criticisms from agreement holders related to changes in personnel, and this tended to increase with the number of changes that took place. The agreement holders linked this to a lack of continuity in terms of availability of advice and support. At the extreme some agreement holders did not know who their current case adviser was[21] and in two cases an NE adviser could not be identified for the NE interview. This might be due to the timing of the interviews as a number appeared to have changed project adviser in early 2014. The interviewees generally felt that it is very important for the NE adviser to be familiar with the area of the agreement and to understand what the HLS agreement is seeking to achieve. This is particularly pronounced when there are issues to be addressed or the agreement is complex.

[21] It is not possible to say with accuracy how many agreement holders did not know who their NE adviser was as this was not a question asked, it just came up in the conversation on some occasions. However, it is estimated to be fewer than 10%.

The majority of agreement holders were aware of the challenges presented by cutbacks and restructuring some time ago, and attributed reductions in availability and delays in dealing with enquiries or changes to these challenges. In most case the agreement holders tended to understand this and accept it, but some did find it frustrating and this has impacts on the implementation of the HLS agreement.

Recommendation 5. Changes in NE advisers.

Where changes to NE advisers are required a set of principles should be established and this should be part of the documentation received by the agreement holder, so that the agreement holder knows what to expect, and what should happen in the event of a change in project adviser.

7.2.3 Option flexibility

Common areas of discontent within agreements referred to the presence of invasive species, notably in some grassland options, and the differences between the need from a farming perspective to control these and the restrictions of the HLS agreement. External issues such as the impact of weather, and the fear of penalties being applied because of how it has affected the timing of certain management operations were also mentioned. Where the agreement included mixed bird seed plots and buffer strips agreement holders did comment about the seed failing, or fears about it failing, which often moved on to concerns about penalties. There may be scope for increased advisory support in relation to these issues.

The view of the NE advisers was that there is flexibility within the HLS scheme but this was not the perspective of the agreement holders. The threat of inspection loomed large; this had been experienced by some and where things were not right payments were reclaimed. Comments from the NE project advisers suggested that there was concern regarding the rotation of arable options as it was difficult to keep track of these and they resulted in multiple derogations. Also on holdings where there were small areas of species rich habitat within a large productive farm business, these were highlighted as being at risk as these were the most likely to be overlooked and therefore more likely to fall behind on management tasks.

Recommendation 6. Option flexibility

The degree of flexibility in management for each option should be stated clearly in the agreement documentation and guidance provide to agreement holders. What can't be adjusted should also made clear in the documentation and advice provision. Again this may be an issue of presentation as much as presence.

7.2.4 Feedback on progress:

Most of the agreement holders have a sense that they are doing 'OK', the classic statement would be something like '*well we think we are getting it right…but not totally sure'*. In this sense they contrast the high level of input from NE advisers at the start of an agreement with the absence of contact, unless requested, in the later stages of the agreement. The presence of a comprehensive agreement with indicators is not seen as a substitute for face-to-face discussion with the project adviser over a site visit. Reassurance that they are on the right track, and won't be penalized for any difference, is what most (though not all) agreement holders are seeking. There are some examples of regular contact between the NE project adviser and the agreement holder, especially in the very innovative HLS agreements, but these were rare amongst the sample (less than 5 of the agreements). Interestingly, in most of these cases the agreement holder was an environmental NGO, so perhaps not someone who needed regular contact several times a year. Whilst many sites had been visited by advisers, the amount of feedback received by agreement holders seemed less than the number of visits once an agreement had started. However, the NE advisers did not feel that provision of feedback to agreement holders was a requirement, or a priority of the of the assessment process. More specific feedback to AHs would have a positive effect on AH engagement and the delivery of outcomes.

It was clear in a few agreements that the AH's enthusiasm had diminished or their focus had moved onto other projects and that lack of regular visits from NE meant this had not been detected. One AH mentioned that he would have done more if he thought NE would revisit (see also recommendation 2 on capital items). Among the other themes to come out were some examples of discussions with other farmers and how this was generally helpful. This was mostly agreement holders sharing challenges and problems, and discussing methods for dealing with them.

Recommendation 7. Follow-up visits and feedback on progress

Given the difficulty of and time taken up by individual visits, it might be worth considering establishing discussion groups enabling the NE Adviser to engage with a number of agreement holders during a site visit or informal discussion on a sort of surgery basis. An overall view was that many agreement holders faced similar challenges but were at different stages, so might be well placed to informally help each other under the supervision of an NE adviser. However, follow-up visits to monitor progress are still required to ensure that AH responsibilities are being fulfilled. This is especially the case for capital items (see recommendation 2 above).

7.2.5 Public profile:

One clear factor was that the public were largely unaware of the activity that goes on and that positive changes were not promoted enough. In some of the NE adviser interviews that have taken place a common theme is that agreement holders are calling in to say '*come and look at my amazing orchids*' but the NE adviser does not always have time to see all the things that are going well. This indicates that NE advisers are not able to provide the level of support in terms of feedback that agreement holders would like.

Recommendation 8. Publicity

Better publicity for good results could be beneficial to the public perception of the scheme, as well as making agreement holders feel that their efforts were appreciated. In addition to providing feedback on progress and, where possible, publicising positive results, advisers could encourage agreement holders to take some responsibility for promoting achievements themselves. This could provide benefits by enhancing the public perception of farmers and their contribution to the countryside. However, no evidence of this type of activity was found within the research.

7.3 Project Objective 4

4: to evaluate the relationship between quality, appropriateness and timing of advice and support provision and progress towards or achievement of agreement outcomes.

7.3.1 Relationships between advice, agreement holder engagement and outcomes

A correlation analysis of relationships between provision of advice and support, and achievement of agreement outcomes was undertaken and is reported in section 6. The lack of significant correlations between individual indicators of advice and support provision and agreement outcomes should not be taken as an indication of lack of influence on outcomes; rather, it arises because the distribution of most scores was at the upper end of the range. A wider range of scores, notably for the field survey work (mainly scored on a 3-point scale) might have 'stretched' the distribution and helped the ranking of agreements, and should be considered in future work. However, we feel it is largely the interaction between multiple factors which has limited the correlation analysis in a sample of this diversity and size.

This has limited the value of the analysis directly and some qualitative case study analysis was undertaken e.g. of low outcome agreements to provide greater insight. The complexity of interactions between advice and support and outcomes, and other influencing factors (e.g. complexity of agreement, ease of difficult of option delivery, degree of management change required etc.) also confounds the analysis.

Nevertheless, two significant correlations did emerge from the analysis. One was a correlation between agreement set-up and achievement of outcomes. This reinforces the importance of a well set-up agreement, as already emphasized. The second result adds a new dimension to our understanding. The complexity of the agreement was related to the adoption of appropriate options (a component of the set-up) and whether management prescriptions were being followed (a measure of delivery). This suggests that complex agreements may need more intensive support.

Fourteen percent of agreement holders felt that their agreement was complex and difficult to manage (section 0). At the start of their agreements, 33% felt that the objectives were challenging; this fell to 14% by the time of the interviews (section 5.2.2.1), nevertheless this represents a substantial minority that are clearly not finding delivery straightforward.

Further analysis on a subset of more complex agreements showed that AH knowledge has a significant impact on outcomes (in addition to agreement set-up), showing the importance of ensuring that AH's are sufficiently well informed to manage such agreements effectively.

Recommendation 9. Complexity of agreements

Unnecessary complexity should be avoided and where agreements are complex, with a large number of options, additional care should be taken to ensure that the agreement holder has the capacity and understanding to deliver the agreement. In addition, extra care needs to be taken in setting up the agreement, progress should be carefully monitored and extra support provided if needed.

7.3.2 Grassland – a special case?

Throughout the various analyses carried out for this report, an emerging theme is that the proportion of grassland options with issues arising has been slightly greater than for other habitat types. Although the differences are not great, the consistency with which grassland arises suggests that particular attention should be paid to this habitat. Care does need to be taken in interpretation however, as grassland was by far the most abundant habitat type represented in options, and the sample size for most other habitat types (other than arable and woodland) was small.

The average percentage of potentially inappropriate (red or amber) options was 12%, but for grassland it was 18%. The option with the highest number of occurrences deemed to be inappropriate by the field surveyor was HK7 (Restoration of species-rich, semi-natural grassland); in such cases the option was often thought to be over-ambitious (section 4.1.2). Some grassland restoration options were highlighted because they were wholly or partially improved or semi-improved and it was thought unlikely that the prescribed management would achieve BAP quality. A similar issue was recorded by Mountford *et al*. (2013)

The percentage of agreement holders who thought that the IoS had been adequately explained to them was slightly lower in relation to grassland options than options for other habitats, and in relation to fit with current management, the most negative comments were received about grassland options, linked to grazing levels and timing of operations (section 5.1.2). This illustrated the inherent conflict in the 'land sharing' options, as management for production and the environment must co-exist on grassland. The level of agreement holder knowledge, as assessed by interviewers, was also lower for grassland than for arable or woodland, with 25% being assessed as 'unclear' or very unclear' (section **Error! Reference source not found.**).

Despite these results, there is no clear indication that levels of implementation of management prescriptions (section 4.2.2) or the achievement of IoS (section 4.2.1) was lower for grassland than for other habitats, though as indicated above, the small sample sizes for most habitats makes such comparisons difficult. However, in view of the importance of grassland habitat within HLS agreements, it is important to ensure that options

are selected appropriately and that agreement holders are adequately supported in their implementation.

Recommendation 10. Grassland options

NE advisers should take particular care during the setting up of agreements to ensure that grassland options are appropriate for the situation, and that agreement holders are fully cognisant of the objectives and their responsibilities under these options.

7.4 Summary List of Recommendations (not in order of priority)

In the summary list presented below, each recommendation is succeeded by an indication of whether it relates mainly to policy and scheme design (P/D) or scheme implementation (SI). However, this distinction is not always absolutely clear; in some cases elements of both will be involved.

1. ***Agreement set-up: choice of options, IoS and MPs (SI)***

This project has demonstrated the need for the right choice of options, IoS and MPs. Delivery processes need to allow for tailoring of IoS and MPs to ensure that they fit the site and NE POs need a good knowledge of the site to avoid the errors which result from reliance on inadequate FEP maps. They also need an understanding of the AH and the normal farming practices to ensure that the IoS are achievable and the management prescriptions are practical. Providing IoS or MPs which don't fit the site, and don't take account of both the capacity of the AH and the starting position of the vegetation, is counter-productive.

2. ***On-going monitoring and support in relation to capital items (SI)***

To maximize achievement of option objectives, it is necessary to check that capital items are installed and management prescriptions are implemented, but also to provide the flexibility to adjust them if they are not delivering the expected outcomes.

3. ***Agreement set-up: Part 3 documentation (P/D)***

The documentation provided to the AH needs to be written in non-technical language, with concepts and terms clearly defined, and possibly site-specific identification aids.

It would be more meaningful if it presented a vision of the objectives and made clear the techniques by which it they to be achieved

- *For the agreement as a whole*
- *For each option*
- *For each parcel or group of parcels where these have different starting points/outcomes*

It needs to present information in separate sections depending on specificity

- *general IoS which apply to whole agreement*
- *IoS which apply to all parcels within an option*
- *IoS specific to particular parcels*

4. ***Indicators of Success (P/D)***

IoS should be clear, appropriate and set at sensible levels for the option and parcel in question. It should also be clear whose responsibility it is to monitor them, and where change is indicated, baseline data should be collected. If the agreement holder is expected to monitor progress then the IoS should relate to attributes of features or species that are readily recognisable by the agreement holder. One possibility might be to include descriptions of the IoS in a separate booklet so that they are easily accessed.

Consideration should be given to the amalgamation of SSSI assessment criteria with option assessment criteria when the agreement is established so that there is one clear set of indicators of success.

5. ***Changes in NE advisers. (P/D)***

Where it becomes necessary to change the NE adviser, a set of principles should be established and this should be part of the documentation received by the agreement holder, so that the agreement holder knows what to expect, and what should not happen.

6. ***Option flexibility (P/D)***

The degree of flexibility in management for each option should clearly be stated and what can't be adjusted equally made clear in the documentation and advice provision. Again this may be an issue of presentation as much as presence.

7. ***Follow-up visits and feedback on progress (SI)***

Given the difficulty of and time taken up by individual visits, it might be worth considering establishing discussion groups enabling the NE Adviser to engage with a number of agreement holders during a site visit or informal discussion on a sort of surgery basis. An overall view was that many agreement holders faced similar challenges but were at different stages, so might be well placed to informally help each other under the supervision of an NE adviser. However, follow-up visits to monitor progress are still required to ensure that AH responsibilities are being fulfilled. This is especially the case for capital items (see recommendation 2 above)

8. ***Publicity (SI)***

Better publicity for good results could be beneficial to the public perception of the scheme, as well as making agreement holders feel that their efforts were appreciated.

9. ***Complexity of agreements (SI)***

Unnecessary complexity should be avoided and where agreements are complex, with a large number of options, additional care should be taken to ensure that the agreement holder has the capacity and understanding to deliver the agreement. In addition, extra care needs to be taken in setting up the agreement, progress should be carefully monitored and extra support provided if needed.

10. ***Grassland options (SI)***

NE advisers should take particular care during the setting up of agreements to ensure that grassland options are appropriate for the situation, and that agreement holders are fully cognisant of the objectives and their responsibilities under these options.

References

Boatman, N., Jones, N., Bishop, J., Blackburn, J., Conyers, S., Elliott, J., Hallam, C., & Huntly, A. (2013*). Monitoring the impacts of Entry level Stewardship.* Final report to Natural England, contract ref no. 22778.

Mountford, J.O., Cooke, A.I. *et a*l (2013). Monitoring the outcomes of Higher Level Stewardship: results of a 3-year agreement monitoring programme. Natural England Research Report.

Natural England (2012). Higher Level Stewardship. Environmental Stewardship Handbook, fourth Edition, January 2013. Catalogue Code: NE350.

Williams, J.M., ed. 2006. *Common Standards Monitoring for Designated Sites: First Six Year Report*. Peterborough, JNCC.

Common Standards Monitoring (2004) JNCC http://jncc.defra.gov.uk/page-2217

Environmental Monitoring in Natural England (2013) NE408

APPENDIX 1 INTERVIEW QUESTIONNAIRES

1. Letter sent to agreement holders

CUSTNAME

ADD1

ADD2

ADD3

ADD4

AGREF

Date

Dear Sir/Madam

Assessing the impact of advice and support on the environmental outcomes of HLS agreements

As an HLS agreement holder, you have been selected to participate in a monitoring survey to understand the impact of advice and support on the achievements and outcomes of HLS agreements. The findings from this project will feed directly into the development of the new agri-environment scheme that is currently being developed, to make sure that lessons learnt from Environmental Stewardship are retained and enhanced in the future scheme.

Defra and Natural England are keen to understand the impact of the advice and support you have received in preparing, and establishing and managing your HLS agreement. The interviews are being organised by the Countryside and Community Research Institute (CCRI) with support from the Food and Environment Research Agency (Fera) and ADAS UK Ltd. They will be contacting a small number of agreement holders (selected to ensure a cross-section of farm characteristics and HLS agreements) for a face-to-face interview lasting about an hour. This would be followed by a field survey of the farm by an ecologist from Fera or ADAS, to be undertaken between April and July 2014 over a maximum of 2 days. You would not need to be present for the field survey, though the surveyor would contact you in advance to ensure that the timing was convenient. The survey is voluntary and the information you provide is covered by the 1998 Data Protection Act; it will not be used for any purpose other than for this study. The report will present the overall findings and no individual agreement holder will be identifiable.

An interviewer from the CCRI, Fera or ADAS will contact you over the coming few weeks to see if you, or the principle decision-maker within your farm business, would be willing to take part in the research. I hope you will be able to help, by sharing your experience of the advice and support provided to assist you with your HLS agreement. We will send you a two-page summary of the final report, which will give a general overview of the outcomes from the research as well as a link to the full version of the report.

Your participation in this research will be greatly appreciated as it is important to get a range of views and experiences. If you have any queries about the research please contact Chris Short at CCRI on 01242 714122 or Lesley Blainey in Natural England via the contact details on the letter.

Yours faithfully,

Lesley Blainey

2. Agreement Holder questionnaire

Assessing the impact of advice and support on the environmental outcomes of HLS agreements (Project LM0432)

HLS Agreement Holder Face-to-Face Interview Questionnaire

Sample No (UID):		Interviewer Name:
Interviewee Name:		
Interviewee Position with respect of HLS agreement and Business:		
Note if different Agreement Holder from the one who signed the HLS agreement at the start:		
Date	Time start:	Time finish:

Introduction

Interviewer: The purpose of this research is to obtain a measure of the agreement holder's understanding of and engagement with the intended HLS agreement outcomes and the associated agreement requirements.

Check that the interviewee has received a letter outlining the research. Give a brief reminder that:

- The key purpose of the interview is to undertake **an assessment of the impact that advice and support have on the environmental outcomes of HLS agreements**. This will involve establishing the experience of implementing the HLS agreement and the level of understanding concerning the agreement objectives. This includes the selection and placement of options and the extent and impact of the advice and support received to this point in the agreement. A separate field survey will provide an ecological assessment of the land under agreement.
- The survey is confidential and details of individual questionnaires won't be released to third parties. The research will not identify anyone taking part in the research nor will they be identifiable in the final report.
- The interview is in 4 parts: - First the questions refer to the farm business and second, an overview of the agreement holder's engagement with Agri-environment schemes. Third, a review of the overall HLS agreement. The fourth section of the interview will focus on the advice and support received over the course of the agreement.
- Ask if the agreement holder is happy for the interview to be recorded. Reassure them that it helps make sure that important points that come up during the interview are not missed but is not used in any other way.
- The interviews usually take about an hour (max an hour and a half). Suggested timings are given for each section.

Section 1 You and your holding/farm business (10 mins)

- Background aspects to the holding like tenure and structure
- Factors influencing decision making in the future

1. What is the total area of the holding/farm and how much of it is [offer land tenure options and record in table below]? (*Offer option to record in acres*)

    a. Total area: …… Hectare or acres (clearly mark one and stick to this for Q2)

2. How much of the land is covered by the HLS agreement? Is there other land under current AES agreements? (*Include option to record in acres*)

Tenure	Total (ha or ac)	HLS (ha or ac)
Owner-occupied		
Rented in - Tenanted (Full Agricultural Tenancy)		
Rented in – Other agreements (Farm Business Tenancy or other agreements of 1 year or less)		
Rented out		
Contract / share farming		
Common land		
Total area farmed		

3. Please give the approximate areas for each of these 6 land types (ha)

	Ha	Acres
Arable crops (cultivated land)		
Permanent crops and orchards		
Permanent grassland & grass leys (enclosed fields)		
Rough grazing (open unenclosed hills/commons)		
Woodland		
Other		

4. Which best describes the farm type of the farm business? (Show prompt card and ask them to choose one)

    Mainly arable / mainly dairy / upland beef & sheep / lowland beef & sheep / pigs / poultry / horticulture / other

5. Since this research is about the role of advice and support, we are interested to know if you receive and act on advice and support in other areas of your business. Do you receive any advice and support in relation to other areas of your business, for example on … ?

    a. The financial side of your business? (e.g. consultant, accountant) …….

    b. Production aspects of enterprises (e.g. agronomist, assurance scheme) …….

    c. Marketing your products (e.g. agencies, buyers) ……

    d. Environment aspects (other than AES) (e.g. habitats, buildings) ……..

6. Would you describe the land holding as (*record one only*)

    a. Agricultural / non-agricultural / not a commercial operation

7. Which of these statements reflect your current plans for the future (next 5 years)? *(choose one only*)

    a. I plan to sell off the business
    b. I plan to reduce the size/intensity of the business
    c. I intend to maintain my business without major changes
    d. I plan to grow/intensify the business
    e. I plan to diversify the business
    f. I intend to change the business but direction of change uncertain at current time

    Note details offered:

8. Please can you tell me your age in years ….

9. Will a member of your family take on the management of the farm after you retire?

    Definitely / very likely / possibly / unlikely / definitely not / don't know / not applicable

10. Approximately how much of your business income (including AES and SPS income) derives from the agricultural enterprises on the farm?

    All of it / most of it / about half / less than half / very little/none

Section 2 Background to environmental and AES involvement (15 mins)

- Discussing your history of involvement with agri-environments schemes
- Your views on combining agriculture and conservation
- Your thoughts on the overall impact of the HLS agreement

11. What do you feel are the key environmental features on your holding, what is their importance?

12. How do they relate to your farm business and enterprises?

13. Can you briefly outline any involvement with previous or additional agri-environment schemes (first one and range of agreements, key features)

Scheme	Dates (approx.)	Key feature(s)

14. Please indicate how much you agree or disagree with each of the following 4 statements concerning the nature of the relationship between conservation and agriculture. For each I need to record one of the four options. (show prompt card)

a. Conservation should be an integral part of agricultural activity	Strongly Agree / Agree / Disagree / Strongly Disagree.
b. Conservation activity is detrimental to efficient agricultural activity	S A / A / D / SD
c. Farmers should take on more responsibility for the environment	S A / A / D / SD
d. Agri-environment schemes are the most effective way to make farmers take an interest in conservation	S A / A / D / SD

15. Are you a member of an environmental group or conservation organisation?
    Yes / No If yes, which one(s) … (*note all those offered*)
16. What do you think your HLS agreement is trying to achieve?

17. What were the three main reasons for you taking up your current HLS agreement?

1.
2.
3.

18. Who were the main influences on you taking up the HLS agreement?

NE Project officer,	Y/N
conservation adviser (seek name and organisation),	Y/N ……..
farm adviser (seek name and organisation)	Y/N ……
neighbouring farmer/HLS agreement holder,	Y/N
other. (details)	Y/N ……

19. Which of the following do you consider to be the three most important aspects within your HLS agreement? With 1 being the most important. (*show prompt card)*

Objective of HLS	Score (1, 2 or 3)
a. Will improve the landscape	
b. Will benefit native plants and wildlife	
c. Will improve access	
d. Will increase protection for soil and water	
e. Will help towards reducing or mitigating climate change	
f. Will improve protection of heritage and the historical environment	

20. What in your view are the main objectives of your HLS agreement? For each one, do you think it has been fully achieved, partly achieved or not achieved?

i.	fully achieved /partly achieved/not achieved
ii.	fully achieved /partly achieved/not achieved
iii.	fully achieved /partly achieved/not achieved
iv.	fully achieved /partly achieved/not achieved

21. Please describe what changes in management or new types of management have been required for each of these objectives.

i.
ii.
iii.
iv.

22. Have you felt able to deliver these overall changes in management? Y / N
    If not, why is that, and what was done to resolve this issue if anything?
    If so, what happened to enable this to be the case?

23. How complex do you feel your HLS agreement is to?
    Understand (Very complex, Complex but manageable, Very manageable)
    Implement (Very complex, Complex but manageable, Very manageable)

24. How comprehensive is the final agreement documentation to you?
    Very comprehensive / fairly comprehensive / Not at all comprehensive

25. Do you look at it: regularly / occasionally / hardly at all:

    Comments on the above (Q23, 24 and 25):

Section 3 Review of advice and support received (20 mins)

- An assessment of the advice and support you have received in relation to the HLS agreement.
- How appropriate, relevant it was to your situation.

26. Can you recall the key stages of your HLS agreement and what advice and support you received (e.g. NE officer, conservation adviser, independent agronomist/consultant, company rep/adviser, land agent, neighbouring farmer, other)? Which was/is the main one?

	Advice received from: (record for each)		
Stage:	Source 1: NE officer	2:	3:
Initial visit Y/N If Yes, was it satisfactory/unsatisfactory? Record comments on those involved re Quality of A&S (amount/length), and its timeliness	Yes/No?	Yes/No?	Yes/No?
Help in Preparing and submitting FEP Y/N If Yes, was it satisfactory/unsatisfactory? Record comments on those involved re Quality of A&S (amount/length), and its timeliness	Yes/No?	Yes/No?	Yes/No?
Formal visit to discuss FEP & agreement Y/N If Yes, was it satisfactory/unsatisfactory? Record comments on those involved re Quality of A&S (amount/length), and its timeliness	Yes/No?	Yes/No?	Yes/No?
Implementation Y/N If Yes, was it satisfactory/unsatisfactory? Record comments on those involved re Quality of A&S (amount/length), and its timeliness	Yes/No?	Yes/No?	Yes/No?

- Which stage(s) was (were) the most influential in shaping your HLS agreement, why was this?

27. For sources other than NE,
    - Why did you choose this source of advice?
    - Had you worked with them before? Y/N If yes, details.

28. For each of the sources of advice and support received (up to 3) did they:

	Source 1: NE Officer	Source 2:	Source 3:
Assist in option selection	Y/N	Y/N	Y/N
Assist in placement of option	Y/N	Y/N	Y/N
Offer specialist advice	Y/N	Y/N	Y/N
Help solve a problem	Y/N	Y/N	Y/N
	Source 1: NE Officer	Source 2:	Source 3:
Visit the site	Y/N	Y/N	Y/N
Fit the farm business	very appropriate, fairly appropriate, inappropriate	very appropriate, fairly appropriate, inappropriate	very appropriate, fairly appropriate, inappropriate
Fit the HLS agreement	very appropriate, fairly appropriate, inappropriate	very appropriate, fairly appropriate, inappropriate	very appropriate, fairly appropriate, inappropriate
Quality of advice & support	high quality, medium quality, low quality	high quality, medium quality, low quality	high quality, medium quality, low quality
Quantity of advice & support	too much, just right, too little	too much, just right, too little	too much, just right, too little
Meet your needs?	totally, partial, a little, not at all.	totally, partial, a little, not at all.	totally, partial, a little, not at all.
What would have happened in the absence of each source of advice/support?			
Would you have known where to go for similar advice/support	yes/no/maybe	yes/no/maybe	yes/no/maybe
Would you have chosen different (less demanding) options	yes/no/some of it	yes/no/some of it	yes/no/some of it
Would you have proceeded with the agreement?	yes/no/some of it	yes/no/some of it	yes/no/some of it

Room for interviewer to note down examples offered by the interviewee (please include any additional sources of advice not noted above):

29. How would you describe your relationship with each source of advice (1-3)?

	1	2	3
Communication	excellent, good, reasonable, poor	excellent, good, reasonable, poor	excellent, good, reasonable, poor
Availability:	excellent, good, reasonable, poor	excellent, good, reasonable, poor	excellent, good, reasonable, poor

30. Has your view of the advice and support you received changed since the start of the agreement?

31. Has anyone been out to see the habitat / feature and comment on the management work underway since the agreement started? Y/N comment:

32. What was your view on the overall objectives of your HLS agreement as you understand them at the start of the agreement?

    Very challenging, reasonable, not demanding enough. Comment:

33. What is your view now? Is it

    Very challenging, reasonable, not demanding enough. Comment:

34. Have there been significant changes to your agreement since it was signed? Y/N If yes [details]

35. Have you needed additional advice on any area of your HLS agreement since you started? Yes/No

    If yes, where did this come from (code as 1-3 above or note as new):

    i. NE officer, conservation adviser, independent agronomist/consultant, company rep/adviser, land agent, neighbouring farmer, other

Section 4 Impact of specific options (15 mins)

This next section looks at the advice and support received in relation to 2-4 core options/combination of options contained within your HLS agreement. It considers the outcomes and management requirements.

36. Environmental outcomes – This set of questions discusses the management activities associated with each option/combination of options. For each:

Q	Option/Option Comb 1:	Option/Option Comb 2:	Option/Option Comb 3:	Option/Option Comb 4:
What area/feature on the farm is option associated with? (mark on map)				
How would this land have been managed in absence of this HLS option?				
How does this differ from any previous AES management on this area (if applicable)				

37. Management prescriptions – This set of questions focuses on the management work required. For each option can you tell me:

	Option/Option Comb 1:	Option/Option Comb 2:	Option/Option Comb 3:	Option/Option Comb 4:
What are the main management tasks?				
Did you have the capacity to do the work within the farm business? Who did it?	Y/N Myself, own labour, contractor	Y/N Myself, own labour, contractor	Y/N Myself, own labour, contractor	Y/N Myself, own labour, contractor
Were/are there any difficulties in carrying out the work?	Y/N comments:	Y/N comments:	Y/N comments:	Y/N comments:

How well did this option fit with your current (farm) management?	1-5, 1=very good fit	1-5, 1=very good fit	1-5, 1=very good fit	1-5, 1=very good fit
How practical did you find the advice and support for this option?	1-5, 1=very practical	1-5, 1=very practical	1-5, 1=very practical	1-5, 1=very practical
Were the HLS payments comparable with the main costs associated with this option?	Y/N comments:	Y/N comments:	Y/N comments:	Y/N comments:

38. Outcomes and indicators – This set of questions are set around what advice you received and what each option is trying to achieve. For each option can you tell me (Use map to assist you):

	Option/Option Comb 1:	Option/Option Comb 2:	Option/Option Comb 3:	Option/Option Comb 4:
What was it anticipated that this option would achieve?				
How effective has the option been? (1-5, 1=very effective)	1-5, 1=very effective	1-5, 1=very effective	1-5, 1=very effective	1-5, 1=very effective
How important are the intended outcomes to you?	Very important / important/ unimportant	Very important / important/ unimportant	Very important / important/ unimportant	Very important / important/ unimportant
Do you agree that this is the best management for the intended outcome?	1-5, 1=strongly agree	1-5, 1=strongly agree	1-5, 1=strongly agree	1-5, 1=strongly agree
Has this option made you more aware of this feature?	Y/N	Y/N	Y/N	Y/N
Has it made you more aware of the management requirements for this feature?	Y/N	Y/N	Y/N	Y/N

Are you aware of the IoS for this option? What sort of things are included?	Y/N comments:	Y/N comments:	Y/N comments:	Y/N comments:
Have the IoS been adequately explained to you?	1-5, 1=very clearly	1-5, 1=very clearly	1-5, 1=very clearly	1-5, 1=very clearly
Have the IoS changed since the start of the agreement?	Y/N comments:	Y/N comments:	Y/N comments:	Y/N comments:
Does the advice and support you received mean that you understand what is required?	1-5, 1=very clear	1-5, 1=very clear	1-5, 1=very clear	1-5, 1=very clear
Has all of the advice received been consistent regarding the outcomes of this option? If no, note differences/ actions taken	Y/N	Y/N	Y/N	Y/N
After interview: note level of knowledge the interviewee had on options(s)	Very fluent on detail, fairly fluent, not very clear on details, very unclear	Very fluent on detail, fairly fluent, not very clear on details, very unclear	Very fluent on detail, fairly fluent, not very clear on details, very unclear	Very fluent on detail, fairly fluent, not very clear on details, very unclear

39. We have discussed the options/combination of options that we considered central to your agreement. Are there other aspects of the agreement that are particularly important to you:

	AH's selections	Reasons and comments
Option 1		
Option 2		
Option 3		
Option 4		

Overall

40. How important has the advice and support you received been to successful delivery of the HLS agreement? 1=Very import to 5=Very unimportant Comments:

41. Have there been any wider benefits arising from the advice and support you have received through the HLS agreement? Y/N Comments:

42. What are your attitudes towards the longer-term environmental benefits of your HLS agreement on the areas/features on your holding? Are you Very positive / fairly positive / not positive, Comments:

43. Has your HLS agreement met your expectations? Y/N, comments:

44. Have you felt adequately supported throughout your HLS agreement thus far? Y/N, comments:

That is the end of the interview but before closing the interview do you have any other comment to make regarding your HLS agreement that you think is relevant?

Thank you very much for taking part in this survey, your contribution has been very helpful and I am grateful for your assistance. The field worker will contact you in Spring 2014. Can I just check we have the right contact details ……..

Record contact details for third party adviser …….

Record time interview closed …

3. NE Project Officer questionnaire

Aim of these interviews is to:

- Provide an assessment of the Agreement Holder's environmental knowledge and attitude (capacity, willingness and engagement) at the time the agreement was signed and of how this might have changed during the agreement term.
- Capture the NE Officer's views on NE's role in agreement establishment as well as on option selection and placement. This includes advice on inclusion of options not previously considered by the agreement holders, and option management and risk.
- Capture NE officer's views on NE's role in providing ongoing support during the agreement term, including pro-active 'care and maintenance' and NE's reactive response to issues raised by the agreement holder or via other routes.
- Capture NE officer's views on the role of third party adviser in influencing the establishment and/or delivery of the HLS agreement.
- Assess the role of the third party adviser(s) in providing advice and support that enhances the environmental outcomes within the HLS agreement
- Assess the quality and significance of the advice and support provided from all sources on achieving outcomes for the HLS agreement.
- Capture views on the areas of delivery of the agreement which worked well, or not so well (including changes in agreement holder knowledge and attitude).

Information to NE officers ahead of the interview:

We would provide:

- The AG number and the options identified for discussion in the AH interview
- Copy of the interview schedule
- Details of any third parties to be interviewed.
- Suggest that they familarise themselves with the agreement ahead of the interview

Interview would be face-to-face or over the phone. Choice will be pragmatic in terms of distance and the number of agreements to discuss. If more than 2 agreements it would make sense for it to be a face-to-face discussion.

We will focus on the current NE adviser, whether or not they have visited the site, and seek to assess the process of hand-over between past and current advisers.

The interview will be entered on screen using an Access database developed by EnvSys Ltd.

Background Details

Q1 Please can you briefly outline your current role with HLS and ES generally? Was this the same in [date this agreement signed]?

Q2 What do you recall of agreement AGxxxxxx, and the AHolders [name]?

Q3 Has there been a change in the NE staff member responsible for this agreement since the application was received? (*record all changes and note periods in agreement development and the agreement term*)?

If you have taken over from a previous NE adviser have you been in contact with them about the agreement/had to refer back to the previous NE adviser for information and advice? Y/N/DK

Q4 Are you aware of any impacts that the changes in NE adviser have had on the AH?

Y/N/DK If yes record comment:

Q5 What outcomes are intended from this HLS agreement?

1. ……
2. ……
3. ……
4. ……

Start of the Agreement

Q6 As far as you know, who initiated the idea that HLS should be considered for this holding?

AH / NE officer / Third party adviser / other

Was it part of a proactive initiative to secure particular environmental features or designated sites?

Q7 Was/were the AH/AHs' (1 = very willing to 5 = very unwilling) to enter the HLS agreement? Why?

Record comment:

Q8 At the start of the discussions was the AH's attitude towards the scheme/NE (1=very positive to 5 = very negative ? Had it changed by the time the agreement was signed? Y/N/DK

Record comment:

Q9 Was the AH's/AHs' environmental knowledge (1 = very strong to 5 = very weak) at the start of the process in relation to the requirements under the HLS agreement?

Record comment:

Q10 With hindsight, is there anything about the agreement that you would have set-up differently in terms of option choice, indicators of success or management requirements? Did NE secure all that it wanted from this agreement?

Agreement Development

Q11 Do you recall if a third party adviser (or advisers) involved in this agreement?

Y/N/DK What part did they play? How effective were they in securing the 'best' agreement?

Q12 Looking at the agreement options and capital items is there anything where the AH's knowledge was very strong?

Y/N/DK Note: ….

Or where their lack of knowledge was a concern? Y/N/DK Note ….

Q13 Would you assess the AH's/AHs' capacity to deliver the HLS agreement as (1 = high capacity to 5 = low capacity)?

Record comment:

Q14 What were the main areas where advice &/or support (from NE) were provided?

Q15 As far as you know, what were the main areas where advice &/or support (from 3rd party) were provided?

Q16 How well (1 = very well to 5 = very poor do you think the AH understood the advice &/or support provided?

Record comment:

Q17 How well (1 = very well to 5 = very poor) do you think the AH implemented the advice &/or support that they received?

Record comment

Q18 Were there any issues concerning the selection of options?

Y/N/DK *record comment*

Q19 Were there any issues concerning management prescriptions?

Y/N/DK *record comment*

Q20 Were there any issues concerning how the agreement fitted with the farming system?

Y/N/DK *record comment*

Agreement Delivery

Q21 Do you feel that on this HLS agreement that NE and the AH are looking for the same environmental outcomes?

Q22 Are these environmental outcomes (1=fully understood to 5 = no more than compliant) by the agreement holder?

R*ecord comment*

Q23 In your view what was/is the greatest risk to this agreement not being successful? Why?

Q24 Has it been necessary to make changes to the agreement at all since it was signed? YES / NO/DK

If YES, specify what was changed (note if outcomes, options, prescriptions, area)

Were changes initiated by NE, a third party or the agreement holder?

What was the reasoning behind these changes?

Q25 As far as you know, so far have all of the capital works been completed on time and to the right standard? YES / NO / DK *record comment*

If NO, which have been left undone/or completed over a longer timescale / not yet completed?

Q26 As far as you know has agreement management been delivered as intended? Y/N/DK

If no, have there been instances of management prescriptions not being adhered to? Why was this?

Q27 In the Agreement holder interviews we asked the AH to provide the 4 main objectives of the agreement and indicate whether they have been met or not. I will read them out and please indicate if you agree with them

Objective 1 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 2 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 3 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 4 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Comments:

Agreement outcomes

Q28 Have you visited the site since the agreement started? YES / NO

Q29 How many times has it been visited by a NE or third party adviser?

Q30 What initiated the visit(s) and what was its/the main purpose of the visits?

Q31 Has the AH ever requested a visit that you/NE were not able to fulfil? How did the AH feel about this?

Q32 Has there been a/site visit(s) to carry out rapid or detailed Integrated Site Assessment or SSSI CSM?

If yes what is the value of this/these visits to the AH?

Q33 Based on your most recent visit, has the agreement been (1 = very successful to 5 = not at all successful) Why?

Record comment:

Q34 What role has the advice and support provided played in this (1=crucial to its success to 5=not helped at all)

Record comment:

Q35 From what you know of the agreement, what could have been improved from an advisery/support perspective?

Nothing /DK or *record response*:

Q36 Has the AH's/AHs' environmental knowledge changed as the agreement has progressed (1=greatly to 5=not at all)?

Record response:

Q37 Has the AH's/AHs' attitude to the agreement changed as the agreement has progressed (1=greatly to 5=not at all)?

Record response:

Q38 How confident are you that the intended outcomes will be delivered? (*select one*)

- Very confident all outcomes are being delivered
- Confident most outcomes are being delivered
- Some confidence that some outcomes are being delivered
- Little confidence that outcomes are being delivered.

Any other comments (and ***Thank you for your time***):

4. Third party adviser questionnaire

Aim of these interviews is to:

- Provide an assessment of the Agreement Holder's environmental knowledge and attitude (capacity, willingness and engagement) at the time the agreement was signed and of how this might have changed during the agreement term.
- Capture the third party adviser's views on their role in agreement establishment as well as on option selection and placement. This includes advice on inclusion of options not previously considered by the agreement holders, and option management and risk.
- Assess the role of third party adviser in influencing the establishment and/or delivery of the HLS agreement.
- Assess the role of the third party adviser(s) in providing advice and support that enhances the environmental outcomes within the HLS agreement.
- Assess the quality and significance of the advice and support provided from all sources on achieving outcomes for the HLS agreement.
- Capture views on the areas of delivery of the agreement which worked well, or not so well (including changes in agreement holder knowledge and attitude).

Information to Third Party Advisers ahead of the interview:

We would provide:

- The AG number and the options identified for discussion in the AH interview
- Copy of the interview schedule
- Details of any third parties to be interviewed.
- Suggest that they familarise themselves with the agreement ahead of the interview.

Interview would be face-to-face or over the phone. Choice will be pragmatic in terms of distance and the number of agreements to discuss. If more than 2 agreements it would make sense for it to be a face-to-face discussion.

We will have to focus on the third party who have been involved from the FEP stage onwards, although some will have contributed advice/support once the agreement had started but they must have at least been to visit the site and meet the AHs.

The interview will be entered on screen using an Access database developed by EnvSys Ltd.

Background Details

Q1 Please can you briefly outline your main work with HLS and ES generally?

Q2 How has this changed? Was the same in [date this agreement signed]?

Q3 What do you recall of agreement AGxxxxxx, and the AHolders [name]?

Q4 What areas were you involved with? E.g. Helping with FEP, option discussion, encouraging entry to the scheme, assisting with the implantation of an option, etc. How were you selected?

Q5 Did you know the AHs before discussing the HLS agreement? YES / NO / DK

Q6 What outcomes are intended from this HLS agreement?

5. ……
6. ……
7. ……
8. ……

Start of the Agreement

Q7 As far as you know, who initiated that HLS be considered for this holding?

AH / NE officer / You / Other third party adviser / other

Was it part of a proactive initiative to secure particular environmental features or designated sites?

Q8 Was/were the AH/AHs' (1 = very willing to 5 = very unwilling) to enter the HLS agreement? Why?

Record comment:

Q9 At the start of the discussions was the AH's attitude towards the scheme/NE (1=very positive to 5 = very negative ? Had it changed by the time the agreement was signed? Y/N/DK

Record comment:

Q10 How would you describe their attitude towards you at the start of the process? Had it changed by the time the agreement was signed?

(1=very positive to 5 = very negative) *Record comment:*

Q11 Was the AH's/AHs' environmental knowledge (1 = very strong to 5 = very weak) at the start of the process in relation to the requirements under the HLS agreement?

Record comment:

Q12 With hindsight, is there anything about the agreement that you would have set-up differently in terms of option choice, indicators of success or management requirements? Did NE secure all that it wanted from this agreement?

Agreement Development

Q13 How effective do you think you were in securing the 'best' agreement?

Q14 Looking at the agreement options and capital items, is there anything where the AHs knowledge was very strong?

Note: ….

Or where their lack of knowledge was a concern: Note ….

Q15 Would you assess the AH's/AHs' capacity to deliver the HLS agreement as (1 = high capacity to 5 = low capacity)?

Record comment:

Q16 What were the main areas where you provided advice &/or support? How did this link to the advice and support from NE?

Q17 How well (1 = very well to 5 = very poor) do you think the AH understood the advice &/or support provided?

Record comment:

Q18 What sort of advice and support did you feel was the most well received?

Q19 How well (1 = very well to 5 = very poor) do you think the AH implemented the advice &/or support that they received?

Record comment

Q20 Were there any issues concerning the selection of options?

Y/N/DK *record comment*

Q21 Were there any issues concerning management prescriptions?

Y/N/DK *record comment*

Q22 Were there any issues concerning how the agreement fitted with the farming system?

Y/N/DK *record comment*

Q23 How important was the role of the FEP in clarifying the advice and support needed to deliver the environmental outcomes?

(1=very important to 5 very unimportant) *Record comment:*

Agreement Delivery

Q24 Do you feel that on this HLS agreement that NE and the AH are looking for the same environmental outcomes?

Q25 Are these environmental outcomes (1=fully understood to 5 = no more than compliant) by the agreement holder?

R*ecord comment*

Q26 In your view what was/ is the greatest risk to this agreement not being successful? Why?

Q27 Has it been necessary to adjust agreement intended outcomes, options or prescriptions since it was signed? YES / NO

If YES, specify what was changed.

Were changes initiated by NE, a third party or the agreement holder?

What was the reasoning behind these changes?

Q28 As far as you know, so far have all of the capital works been completed on time and to the right standard? YES / NO / DK *record comment*

If NO, which have been left undone/or completed over a longer timescale / not yet completed?

Q29 As far as you know has agreement management been delivered as intended and have there been instances/any serious instances of management prescriptions not being adhered to? Why was this?

Q30 In the Agreement holder interviews we asked the AH to provide the 4 main objectives of the agreement and indicate whether they have been met or not. I will read them out and please indicate if you agree with them

Objective 1 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 2 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 3 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Objective 4 – agree/partly agree/ not agree Fulfilled - agree/partly agree/ not agree

Comments:

Agreement outcomes

Q31 Have you visited the site since the agreement started? YES / NO

Q32 What initiated the visit(s) and what was its/the main purpose of the visits?

Q33 Has the AH ever requested a visit that you were not able to fulfil? How did the AH feel about this?

Q34 Based on your most recent visit, has the agreement been (1 = very successful to 5 = not at all successful) Why?

Record comment:

Q35 From what you know of the agreement, what could have been improved from an advisery/support perspective?

Nothing / or record response:

Q36 Have there been any changes in NE advisers since the agreement was signed? What do you feel is the impact of this/these change(s)?

Q37 Has the AH's/AHs' environmental knowledge changed as the agreement has progressed (1=greatly to 5=not at all)?

Q38 Has the AH's/AHs' attitude to the agreement changed as the agreement has progressed (1=greatly to 5=not at all)?

Q39 How confident are you that the intended outcomes will be delivered?

- Very confident all outcomes are being delivered
- Confident most outcomes are being delivered
- Some confidence that some outcomes are being delivered
- Little confidence that outcomes are being delivered.

Any other comments (and ***Thank you for your time***):

APPENDIX 2 DATA TABLES

Table 31 Appropriate Option Selection: number of FEP codes allocated to RAG

Option	Red	Amber	Green	Total	% inapp
HB12			9	9	0%
HC10			5	5	0%
HC12			9	9	0%
HC13		1	1	2	50%
HC14			1	1	0%
HC15			6	6	0%
HC16			3	3	0%
HC17			1	1	0%
HC18			3	3	0%
HC19			1	1	0%
HC20			6	6	0%
HC21			2	2	0%
HC7			14	14	0%
HC8	1	1	16	18	11%
HC9		1		1	100%
HD7			1	1	0%
HE10		2	10	12	17%
HF12		1	17	18	6%
HF12NR			3	3	0%
HF14			3	3	0%
HF20		2	5	7	29%
HG7		1	6	7	14%
HJ3			4	4	0%
HJ4			1	1	0%
HJ6			3	3	0%
HK10		3	5	8	38%
HK11			5	5	0%
HK12			3	3	0%
HK14			1	1	0%
HK15		3	26	29	10%
HK16		1	9	10	10%
HK17		2	7	9	22%
HK6		3	22	25	12%
HK7	1	8	39	48	19%
HK8		1	4	5	20%
HK9	1	1	6	8	25%
HL10	1		30	31	3%
HL7			9	9	0%
HL8		2		2	100%
HL9			6	6	0%
HO2			3	3	0%
HO3			2	2	0%
HO4	1			1	100%
HP1			1	1	0%
HP6			1	1	0%
HQ1			1	1	0%
HQ3			1	1	0%
HQ6			1	1	0%
HQ7			1	1	0%
HQ8			2	2	0%
Total	5	33	315	353	11%

Table 32 Appropriateness of IoS by IoS type, ordered by % inappropriate

IoS types	Red	Amber	Green	Total	% inapp
target species	1	4	10	15	33%
vegetation height		1	2	3	33%
flowering	3	13	44	60	27%
ride/glades/firebreaks	3	1	13	17	24%
grazing regime	1	4	26	31	16%
positive indicators	9	19	161	189	15%
disturbance	3		18	21	14%
vegetation cover	3	1	26	30	13%
wildflw cover		5	37	42	12%
habitat extent	3	1	34	38	11%
invertebrates		1	9	10	10%
birds		8	76	84	10%
structure	5	13	185	203	9%
tree management	1	1	22	24	8%
water levels	1		11	12	8%
bare ground		7	82	89	8%
arch/hist		4	58	62	6%
hedge management	1		16	17	6%
sward height		1	16	17	6%
standing water		1	20	21	5%
negative indicators	2	2	114	118	3%
seeding	1		39	40	3%
bracken control			16	16	0%
burning			8	8	0%
cereal density			6	6	0%
erosion			15	15	0%
field size			4	4	0%
litter			1	1	0%
moist soil			20	20	0%
open water			2	2	0%
poaching/compaction			1	1	0%
pollution			1	1	0%
reed cover/ht			3	3	0%
scrub control			45	45	0%
stock exclusion			3	3	0%
surface features			5	5	0%
tree establishment			5	5	0%
Total	37	87	1154	1278	10%

Table 33 Appropriateness of IoS level

IoS types	Red	Amber	Green	Total	% inapp
target species	3	5	7	15	53%
ride/glades/firebreaks	4	4	9	17	47%
wildflw cover	4	15	23	42	45%
invertebrates		4	6	10	40%
flowering	7	17	36	60	40%
habitat extent	3	12	23	38	39%
positive indicators	17	51	121	189	36%
vegetation height		1	2	3	33%
structure	9	45	149	203	27%
grazing regime	2	6	23	31	26%
moist soil		5	15	20	25%
sward height		4	13	17	24%
birds	3	15	66	84	21%
tree establishment		1	4	5	20%
hedge management		3	14	17	18%
water levels		2	10	12	17%
vegetation cover	2	3	25	30	17%
arch/hist	1	9	52	62	16%
negative indicators	2	16	100	118	15%
bare ground	1	12	76	89	15%
tree management	1	2	21	24	13%
seeding	1	3	36	40	10%
disturbance	2		19	21	10%
scrub control		4	41	45	9%
erosion		1	14	15	7%
standing water		1	20	21	5%
surface features			5	5	0%
stock exclusion			3	3	0%
reed cover/ht			3	3	0%
pollution			1	1	0%
poaching/compaction			1	1	0%
open water			2	2	0%
litter			1	1	0%
field size			4	4	0%
cereal density			6	6	0%
burning			8	8	0%
bracken control			16	16	0%
Grand Total	62	241	975	1278	24%

Table 34 Appropriate type of IoS by option

	Options	Red	Amber	Green	Total	% inappr
36	HK16	1	5	11	17	35%
50	HP6	1		2	3	33%
29	HK8	2	8	21	31	32%
17	HD7		1	3	4	25%
33	HK12	1	2	9	12	25%
53	HQ6		1	3	4	25%
48	HO4	1		4	5	20%
2	HC7	2	6	38	46	17%
28	HK7	9	21	172	202	15%
1	HB12	1	3	24	28	14%
7	HC12	1	1	13	15	13%
3	HC8	2	5	47	54	13%
42	HL10	9	6	126	141	11%
15	HC20		2	17	19	11%
37	HK17	3		26	29	10%
38	HK18		2	18	20	10%
18	HE10		4	38	42	10%
31	HK10		3	29	32	9%
35	HK15	2	3	54	59	8%
11	HC16		1	11	12	8%
55	HQ8		1	11	12	8%
27	HK6	1	4	59	64	8%
10	HC15		2	24	26	8%
19	HF12		6	82	88	7%
23	HG7	1		17	18	6%
4	HC9			2	2	0%
5	HC10			10	10	0%
6	HC11			3	3	0%
8	HC13			7	7	0%
9	HC14			3	3	0%
12	HC17			5	5	0%
13	HC18			7	7	0%
14	HC19			3	3	0%
16	HC21			6	6	0%
20	HF12NR			11	11	0%
21	HF14			12	12	0%
22	HF20			13	13	0%
24	HJ3			18	18	0%
25	HJ4			4	4	0%
26	HJ6			8	8	0%
30	HK9			26	26	0%
32	HK11			19	19	0%
34	HK14			5	5	0%
39	HL7			20	20	0%
40	HL8			7	7	0%
41	HL9			32	32	0%
43	HL12			3	3	0%
44	HL13			5	5	0%
45	HL15			4	4	0%
46	HO2			24	24	0%
47	HO3			8	8	0%
49	HP1			4	4	0%
51	HQ1			1	1	0%
52	HQ3			7	7	0%
54	HQ7			4	4	0%
56	HQ11			4	4	0%
57	HQ12			1	1	0%
58	HR4			2	2	0%
59	HR5			3	3	0%
60	HR6			4	4	0%
	Total	37	87	1154	1278	10%

Table 35 Appropriateness of MPs, by option

Option	No	Yes	Total	%inappr	Option	No	Yes	Total	%inappr
HB12	1	63	64	2%	HK11	1	34	35	3%
HC7	9	108	117	8%	HK12		21	21	0%
HC8	15	160	175	9%	HK14		12	12	0%
HC9	1	7	8	13%	HK15	6	196	202	3%
HC10	1	20	21	5%	HK16	3	61	64	5%
HC11		5	5	0%	HK17	2	104	106	2%
HC12	2	44	46	4%	HK18		64	64	0%
HC13		17	17	0%	HL10		79	79	0%
HC14	1	5	6	17%	HL12		11	11	0%
HC15		38	38	0%	HL13		4	4	0%
HC16		24	24	0%	HL15		8	8	0%
HC17		11	11	0%	HL7		35	35	0%
HC18	1	19	20	5%	HL8	1	11	12	8%
HC19	1	8	9	11%	HL9		31	31	0%
HC20	1	57	58	2%	HO2		48	48	0%
HC21		20	20	0%	HO3		21	21	0%
HD7	2	12	14	14%	HO4		7	7	0%
HE10	3	113	116	3%	HP1		8	8	0%
HF12	1	139	140	1%	HP6		7	7	0%
HF12NR		32	32	0%	HQ1		11	11	0%
HF14		21	21	0%	HQ11		3	3	0%
HF20		49	49	0%	HQ12		1	1	0%
HG7	1	43	44	2%	HQ3		7	7	0%
HJ3		49	49	0%	HQ6		8	8	0%
HJ4		11	11	0%	HQ7		14	14	0%
HJ6		14	14	0%	HQ8		21	21	0%
HK6	5	135	140	4%	HR1		7	7	0%
HK7	12	383	395	3%	HR2		7	7	0%
HK8		54	54	0%	HR4		2	2	0%
HK9	2	75	77	3%	HR5		6	6	0%
HK10		83	83	0%	HR6		14	14	0%
					Total	72	2682	2754	3%

Table 36 Achievement of Ios by option

Option	No. of options	Not on target	On target	Achieved	Total IoS	% Achieved
HB12	9		4	17	21	100%
HC10	4	1	1	8	10	90%
HC12	5	3	1	11	15	80%
HC13	2	2	1	4	7	71%
HC14	1	1			1	0%
HC15	5	4	4	16	24	83%
HC16	2	6		6	12	50%
HC17	1	1	1	3	5	80%
HC18	2		1	6	7	100%
HC19	1	2		1	3	33%
HC20	6	3	3	12	18	83%
HC21	2	3		3	6	50%
HC7	11	8	8	29	45	82%
HC8	16	13	16	25	54	76%
HC9	1	1		1	2	50%
HD7	1	1		3	4	75%
HE10	12	11	5	23	39	72%
HF12	17	18	29	20	67	73%
HF12NR	3	4	1	6	11	64%
HF14	3	2		6	8	75%
HF20	5	3	1	6	10	70%
HG7	5	4	5	3	12	67%
HJ3	4		3	13	16	100%
HJ4	1			4	4	100%
HJ6	2		3	4	7	100%
HK10	6		2	20	22	100%
HK11	2	2	1	5	8	75%
HK12	2		2	3	5	100%
HK14	1		1	3	4	100%
HK15	18	4	8	31	43	91%
HK16	5	5	2	7	14	64%
HK17	8	6	2	15	23	74%
HK6	13	8	8	37	53	85%
HK7	41	51	26	102	179	72%
HK8	5	8	3	20	31	74%
HK9	5	5	4	8	17	71%
HL10	10	28	21	74	123	77%
HL7	4	1	1	16	18	94%
HL8	1		2	5	7	100%
HL9	2	1	7	19	27	96%
HO2	3	6	5	10	21	71%
HO3	1		1	4	5	100%
HO4	1	2	1	1	4	50%

Option	No. of options	Not on target	On target	Achieved	Total IoS	% Achieved
HP1	1		1	2	3	100%
HP6	1	1		1	2	50%
HQ1	1			1	1	100%
HQ3	1			7	7	100%
HQ6	1		1	3	4	100%
HQ7	1		1	3	4	100%
HQ8	2		3	9	12	100%
HC11	3		1	2	3	100%
HK18	7	3	3	10	16	81%
HL12	2		1	2	3	100%
HL13	1		2	2	4	100%
HL15	2			2	2	100%
HQ11	1			1	1	100%
HQ12	1			1	1	100%
HR4	1		2		2	100%
HR5	1		1	2	3	100%
HR6	4	1		3	4	75%
Total	280	223	200	661	1084	79%

Table 37 Implementation of different types of management prescription

MP type	No	Yes	Total	% not being followed
Bird disturbance	0	11	11	0%
Bird management	0	2	2	0%
Bird present	0	1	1	0%
Bonfires location	0	10	10	0%
Boundary gateways	0	1	1	0%
Boundary removal	0	7	7	0%
Chemicals fungicides	0	2	2	0%
Chemicals herbicides	0	2	2	0%
Chemicals insecticides	0	1	1	0%
Chemicals pesticides	0	1	1	0%
Cultivation date	0	10	10	0%
Cultivation management	0	4	4	0%
Disturbance management	0	1	1	0%
Disturbance rock/scree	0	13	13	0%
Ditch cutting	0	2	2	0%
Ditch management	0	8	8	0%
Ditch mgmt dates	0	8	8	0%
Drainage blocking	0	1	1	0%
Drainage grips	0	4	4	0%
Drainage maintenance	0	2	2	0%

MP type	No	Yes	Total	% not being followed
Drainage water movts	0	4	4	0%
Fen pollution	0	1	1	0%
Grazing dates	0	4	4	0%
Harrowing etc dates	0	2	2	0%
Harrowing etc management	0	1	1	0%
Harrowing etc prohibited	0	4	4	0%
Hay cutting date	0	2	2	0%
Hay grazing	0	2	2	0%
Hay green hay	0	2	2	0%
Hay hay mgmt	0	1	1	0%
Hay removal	0	3	3	0%
Hay rotation	0	1	1	0%
Hedge cutting dates	0	3	3	0%
Hedge height	0	9	9	0%
Hedge management	0	7	7	0%
Hedge structure	0	1	1	0%
Pond invasives	0	2	2	0%
Pond structure	0	6	6	0%
Soil damage	0	4	4	0%
Sowing management	0	2	2	0%
Sowing regen	0	1	1	0%
Tipping prohibited	0	2	2	0%
Topping prohibited	0	6	6	0%
Cultivation prohibited	2	151	153	1%
Disturbance machinery	1	43	44	2%
Drainage modification	3	120	123	2%
Tree dead wood	2	68	70	3%
Chemicals encroaching	1	32	33	3%
Soil damage	6	130	136	4%
Topping dates	1	20	21	5%
Soil inputs	5	98	103	5%
Margin width	1	16	17	6%
Sowing grass	1	16	17	6%
Arch/hist protection	4	62	66	6%
Grazing supp feed	10	126	136	7%
Grazing stocking density	1	12	13	8%
Mgmt plan cap works	1	10	11	9%
Soil compaction	1	9	10	10%
Grazing stock exclusion	4	35	39	10%
Control weeds	14	113	127	11%
Ride/glade management	2	14	16	13%
Tree management	3	20	23	13%
Mgmt plan implementation	2	11	13	15%
Fallow period	1	5	6	17%

MP type	No	Yes	Total	% not being followed
Sowing frequency	2	10	12	17%
Sowing re-seeding prohibited	1	5	6	17%
Boundary fences	1	4	5	20%
Fen management	1	4	5	20%
Harvesting date	1	4	5	20%
Control pests	13	51	64	20%
Grazing stocking period	7	26	33	21%
Control burning	4	14	18	22%
Pond management	1	3	4	25%
Tree removal	1	3	4	25%
Scrub management	7	20	27	26%
Topping limited area	3	8	11	27%
Control invasives	4	10	14	29%
Cutting removal	2	5	7	29%
Sowing species	12	25	37	32%
Control rushes	1	2	3	33%
Grazing ditches	1	2	3	33%
Cutting date	10	19	29	34%
Grazing sward height	15	27	42	36%
Grazing stock type	8	13	21	38%
Cutting management	4	6	10	40%
Heath management	2	3	5	40%
Butterflies management	1	1	2	50%
Grazing sward structure	5	4	9	56%
Drainage bank mgmt	2	1	3	67%
Tree establishment	6	3	9	67%
Control bracken	6	2	8	75%
Hay manure/fert	1		1	100%
Margin management	1		1	100%
Margin species	1		1	100%
Sowing seed rate	1		1	100%
Total	191	1547	1738	11%

APPENDIX 3 LIST OF HLS OPTIONS

HLS Management options

HB11	Maintenance of hedges of very high environmental value (2 sides)
HB12	Maintenance of hedges of very high environmental value (1 side)
HB14	Management of ditches of very high environmental value
HC10	Creation of woodland outside of the SDA & ML
HC11	Woodland livestock exclusion supplement
HC12	Maintenance of wood pasture and parkland
HC13	Restoration of wood pasture and parkland
HC14	Creation of wood pasture
HC15	Maintenance of successional areas and scrub
HC16	Restoration of successional areas and scrub
HC17	Creation of successional areas and scrub
HC18	Maintenance of high value traditional orchards
HC20	Restoration of traditional orchards
HC21	Creation of traditional orchards
HC7	Maintenance of woodland
HC8	Restoration of woodland
HC9	Creation of woodland in the SDA
HD9	Maintenance of designed/engineered water bodies
HE10	Floristically enhanced grass margin
HF12	Enhanced wild bird seed mix plots
HF14	Unharvested, fertiliser-free conservation headland
HF20	Cultivated fallow plots or margins for arable plants
HF24	Supplementary feeding in winter for farmland birds
HG7	Low input spring cereal to retain or re-create an arable mosaic
HJ5	In-field grass areas to prevent erosion or run-off
HK10	Maintenance of wet grassland for wintering waders and wildfowl
HK11	Restoration of wet grassland for breeding waders.
HK12	Restoration of wet grassland for wintering waders and wildfowl
HK13	Creation of wet grassland for breeding waders
HK14	Creation of wet grassland for wintering waders and wildfowl
HK15	Maintenance of grassland for target features
HK16	Restoration of grassland for target features
HK17	Creation of grassland for target features
HK18	Supplement for haymaking
HK6	Maintenance of species-rich, semi-natural grassland
HK7	Restoration of species-rich, semi-natural grassland
HK8	Creation of species-rich, semi-natural grassland
HK9	Maintenance of wet grassland for breeding waders
HL10	Restoration of moorland
HL13	Moorland re-wetting supplement
HL15	Seasonal livestock exclusion supplement
HL16	Shepherding supplement

HL7	Maintenance of rough grazing for birds
HL9	Maintenance of moorland
HN8	Educational access - base payment
HN9	Educational access - payment per visit
HP10	Supplement for extensive grazing on saltmarsh
HP6	Restoration of coastal saltmarsh
HQ1	Maintenance of ponds of high wildlife value < 100 sq m
HQ11	Wetland cutting supplement
HQ12	Wetland grazing supplement
HQ13	Inundation grassland supplement
HQ2	Maintenance of ponds of high wildlife value > 100 sq m
HQ6	Maintenance of fen
HQ7	Restoration of fen
HQ8	Creation of fen
HQ9	Maintenance of lowland raised bog
HR1	Grazing supplement for cattle
HR2	Grazing supplement for native breeds at risk
HR4	Supplement for control of invasive plant species
HR5	Bracken control supplement
HR6	Supplement for small fields
HR7	Supplement for difficult sites
HR8	Supplement for group applications

Capital Items

ACI	Access capital item
BCA	Chemical Bracken Control - Area Payment
BCB	Chemical Bracken Control - Base Payment
BDS	Difficult site supplement for bracken & scrub control
BMA	Mechanical Bracken Control - Area Payment
BMB	Mechanical Bracken Control - Base Payment
BR	Stone-faced hedgebank repair
C	Culvert
CBT	Coppicing bankside trees
CCG	Cattle grid
CDB	Cattle Drinking Bay
CLH	Livestock handling facilities
DR	Ditch, dyke and rhine restoration
E	Removal of eyesore
ER2010	Earth bank restoration
ERC	Casting up supplement - hedgebank options
FB2010	Footbridge
FD	Deer fencing
FDS	Fencing supplement - difficult sites
FP	Fruit tree pruning and restoration
FPE	Permanent electric fencing

FR	Rabbit fencing supplement
FSB2010	Sheep Fencing - newly restored boundary
FSH2010	Sheep Fencing
FW2010	Post and wire fencing
FWB2010	Post and wire fencing - newly restored boundary
GB2010	Bridle gate
GBD	Grip blocking on difficult sites
GF	Wooden field/river gate
GK2010	Kissing gate
GS	Supp: Use of Native Seed
HAP	Historical & archaeological feature protection
HBD	Hard base for livestock drinker
HBF	Hard base for livestock feeder
HR2010	Hedgerow restoration includes laying, coppicing and gapping up
HSC	Hedgerow supplement - substantial pre- work
HSL	Hedgerow supplement - top binding and/or staking
IDF	Identification of orchard fruit tree varieties
LHX	Major preparatory work for heathland re-creation or restoration
LSP	Stone gate post
LWW	Wooden wings for gates
MT	Planting fruit trees
OES	Special Projects
PAH	Professional help with an implementation plan
PC	Pond creation - first 100 sq m
PCP	Pond creation > 100 sq m
PH	Hedgerow planting - new hedges
PR	Pond restoration - first 100 sq m
PRP	Pond restoration > 100 sq m
RPD	Cross drains under farm tracks
S1	Soil bund
S2	Timber sluice
SA	Scrub management < 25% cover
SB	Scrub management 25% - 75% cover
SBB	Bat / Bird box
SC	Scrub management > 75% cover
SCP	Creation of temporary ponds > 100m sq
SCR	Creation of temporary ponds - first 100m sq
SF	Planting fruit trees
SS	Scrub Control - Base Payment
SSM	Small mammal boxes
ST2010	Timber stile
STT	Planting standard parkland/hedgerow tree
SW	Management of scrub on wet sites
TGS	Parkland tree guard (welded steel)
TO	Orchard tree guard (tube and mesh)
TOS	Orchard tree guard (sheep proof)

TP	Parkland tree guard (post and rail/wire)
TR	Spiral rabbit guards
TRE	Tree removal
TS1	Tree surgery minor to include minor pollarding
TS2	Tree Surgery major to include major pollarding
TSP	Planting tree and shrub/ whips and transplants
TT	Tree tube and stake
TW	Stone wall supplement - top wiring
WDC	Creation of ditches (rhines and dykes)
WDI	Drove improvement
WGC	Creation of gutters
WPS	Construction of water penning structures
WR2010	Stone wall restoration
WRD	Stone wall supplement - difficult sites
WRQ	Stone wall supplement - stone from quarry
WRS	Supplement - wall restoration
WS	Water supply
WT	Water trough

APPENDIX 4 EXTRACTS FROM INTERVIEW TRANSCRIPTS

Has your view of the advice and support you received changed since the start of the agreement
Never come across this [HLS agreement] before and so have learnt more. Advice wasn't taken on board when the agreement went live but it is being taken on board now.
Yes, it has diminished.
Yes, the NE people are more cost-conscious.
Not really, as [the AH] didn't know what was going to happen through the agreement. [The AH] could have more support from Natural England but it would depend on the context of the need for advice. For example, if it was simply for compliance or if the advice was more innovative.
In hindsight, [the AH] would have liked more advice.
No, it [the advice] has been good throughout.
[The] advice has been consistent. No change [to the AH's view].
[The AH's view has] possibly improved [as they] think it was perhaps too bureaucratic at the beginning.
No, the value and flexibility of the advice is excellent. Being able to talk to someone, and continuity of contact is crucial.
No, the value and flexibility of the advice is excellent. Being able to talk to someone, and continuity of contact is crucial.
[The AH's view of the advice has] probably improved.
[The AH] would go through [an] agent.
No, [the advice] been good all the time.
No, [the AH is] happy with what [they] have received.
Yes, [the AH] was given enough help to fill in the form but not enough to get really engaged. It would have been useful if someone had shown [the AH] which plants are important and why. Also, [the AH] doesn't understand why Natural England wants to kill [the] sycamore [trees]; [the AH] regards them as nice mature trees. Again, [a] lack of understanding means [a] lack of engagement.

No, it [the advice] was fine.
Yes, the advice was really high quality at the beginning [but] then you realize it was perhaps not the best thing to do because every farm is different. It is hard to know if it [the advice] will work here.
No, but [the AH] feels that Natural England are focused on implementing the rules and are less optimistic on some aspects of conservation itself. [The AH] feels that they [NE] look online for faults in compliance.
[The AH's] view has changed on combination of options selected as well as on certain timing of activities within the agreement.
[The AH's opinion of the advice] used to be very good but has declined recently.
Advice from NE is very generic, and not particularly good. An example is [with] regards to a seed mix: AH asked for advice [on] which one he should use [and the] adviser just suggested a generic one which didn't work.
[The AH] is forever adjusting what they do, and consults with NE to ensure that things are approved. The aim of the adjustments is to achieve the maximal environmental benefits and outcomes, and stems from work between [the AH] and [an] adviser, rather than NE who are used as approval.
Advice [the AH] had at the time was ok [but the AH] did question whether one or two things were necessary, to do with archaeology.
The consultant left, so [was] not present at the implementation stage. In regard to NE, [the AH] not sure who [they are] dealing with and whom to ask. [The AH] does not see anything of them.
Yes, there are things [the AH] initially agreed with and now disagrees with and vice versa.
The advice and support was very significant; more so than the package of options or the discussion around particular options. There is quite a lot of work required on this agreement; far more than under the ESA.
The number of officers has dramatically reduced and not many officers are available or accessible.
[It is] difficult to say. [There has been] some evolution of things. [The AH has had] annual meetings with NE.
You wonder whether some of the things that you do will achieve what it is intended; will they provide 'value for money'?

[There] has not been a change. The number of NE staff was reduced significantly but [the AH] have not had any problems with accessing the adviser.
Yes purely because of the change of project officer. Keeping the same project officer is a great help.
No, advice has been consistent as it is fairly straightforward. Personal circumstances have been biggest problem (bereavement) [and] there have been some problems with anti-social behavior in one area.
Yes, the quality of advice and support has deteriorated over time. Great to begin with but now [the AH] can't wait until the scheme ends.
It's hard to say. It is difficult to get hold of them; we [the AH] haven't seen them [NE] for years.
Perfectly good [advice].
Yes, because we [the AH] asked for advice and chased when hadn't heard anything.
No, it's still good advice.
Once you get to understand the scheme it's OK, but it is hard for people with no experience of such schemes to enter the process.
Yes, [the AH was] slightly disappointed at times. For example, the financial support for the capital elements is not there after the first few years. We [the AH] have got the stage where fences are falling down after 4-5 years. [The AH] needs a longer-term investment with additional funding.
Yes, post-cuts it's now very difficult to get hold of people at Natural England. During the early stages [of the agreement], the communication was excellent.
Yes, the advice and support has become worse. AH thinks that new agreements [between NE and AH] are well nurtured whereas existing AH are forgotten and not supported throughout their agreement. AH wants new fencing, but cannot get it. [There is] no capital payment support after the initial payments.
Yes, would double check and perhaps extend the timescale of some options.
No, [the AH] can't speak highly enough of NE officer. [The NE officer] answered all AH's questions.
AH has had some unforeseen issues arise regarding grazing, which couldn't really have been anticipated. Conversely, there were some problems anticipated which never materialized.
[There was] lots of advice at the beginning [of the agreement], but not much on-going support.

No, [the AH] received all the advice and support needed.
[The AH] realized [the NE officer was] not quite as good and available as [they] thought at [the] start [of the agreement]. Due to difficult to NE person out as very busy
[NE was] no good [at the start of agreement], but better since then.
The initial [NE officer was] full of promise [but] did nothing. [The current NE officer is] much better; [they] get back to you if you leave a message.
NE [is] learning as they go along. [They] altered stocking rate – allowed [it] to increase – [and] changed grazing intensity on another parcel.
At beginning [the advice was] very good, but following advice has been lacking.
No, [the AH received] good advice at start [and has had] no problem with [the] adviser.
No, [the AH has] had no contact from NE since the first year [of the agreement] so assumes everything is fine.

What are your attitudes towards the longer-term impact of your HLS agreement on the areas/features on your holding - comments
Hedges really do help, as has the planting of the wood.
[The AH is] delighted with the outcome.
Not positive, as you don't know what will happen especially with NE and funding. This has been seen through their change in commitment to the latter stages of the agreement.
[There is a] need to integrate the water and wood environments and features into HLS. There is very little that can be achieved with them at the moment. There are lots of boundaries between land, pure agriculture and water management.
[The AH] sees [the project] as something good which will help improve the countryside as well as being commercially beneficial.
Progress has been slow.
Money is needed to continue these benefits, especially in the SE which is facing pressures from population etc. Without support it makes it difficult to manage and maintain land, and [there is a] need to encourage farmers to engage with AES as they don't need to be out of pocket. AES helps the trust, as it provides [a] 10 year income stream.
[The AH is] positive about what [the] agreement has achieved, but concerned over changes to NELMS from ELS/HLS.
Things need to change, but in general [the AH is] positive.

Positive about what our agreement has achieved, but concern over changes to NELMS from ELS/HLS.
[The AH is] keen to engage with NE in the future.
There needs to be things in place for things to continue; we would struggle without financial support. It really helps if you are pro-active and forthright in your approach.
[The project] fits in with farm business [which] is very important. [It also] acts as a tourist attraction, so can lower costs.
[The AH has] mixed feelings: the government don't know how CAP and Greening is going to develop, so neither do NE.
[The AH is] concerned about the weather and the need for flexibility to feed the land after years of starvation through no or very low inputs.
[The AH] doesn't know what the outcomes are supposed to be so can't comment [on] if they have been achieved. No [comment] from the AH on what [they] could have brought to the table.
[The] agreement finishes [in] 2016 [and the AH is] not sure what will do next; [they] might just put back into productive agriculture.
[The AH is] very keen to do all [they] can for wildlife while maintaining the farm.
AH [is] very keen to do [their] best for wildlife and to maintain character of [the] farm and landscape.
[The AH is] not sure what will happen at end of agreement [but they are] not willing to commit for another 10 years because of [their] age.
If there is still support in the future.
[There is a] need to refine [the agreement] further, including if some of the ecological focused areas will be mandatory and if HLS will be included in that. [The AH is] unsure on the financial side; [there is a] need to ensure payments are comparable.
It is important that something like this continues. Agriculture occupies a big part of the land; it helps the countryside in good shape.
They [the AH will] wait to see what the new HLS will be.
What is going to happen in the next few years?
[The AH is] apprehensive about the future. There seems to be a change in focus towards production, rather than environmental management. There should be funding for areas which can be productive, and areas which need to be conserved. [The AH is] concerned that 10 years since starting, there isn't as much interest in the environment now.
Got to be optimistic: how much we [the AH] have achieved [we] can't really say. Hope they [NE] are happy.

[The agreement is] really important – this is the inspection point.
There is concern looking forward regarding scope for another agreement and whether or not scrub clearance and grazing can continue. It is a long term site and [the agreement has] really only just started.
Will be a crying shame if all the margins and grass didn't continue. There needs to be an incentive [as] meadows will degrade very quickly.
Once the scheme expires, there will be management but it won't be in the same way as what the scheme is trying to achieve. It will be well-managed but not with as much emphasis on environment.
[The AH is] not sure what will happen when the scheme ends. It has benefited the wildlife but [the AH is] not sure about the amount of money; what would have happened anyway?
Three quarters of the grass area is a success, less so on borders of neighbouring farm. [The AH] thinks the establishment technique was wrong.
There have been massive improvements to the farm all-round. [The AH] sees no reason why this shouldn't continue if the funding is there.
[The AH] would like to think so [but] as it is a tenant farm [it is] difficult to know. [The AH] suspects that the farm will be sold by council once [the] tenancy ends.
As long as the AH keeps getting paid.
We are there now. The AH [will] carry on the work once the agreement comes to an end.
[The AH was] positive, but [didn't] want more and more land being put into HLS; there is enough now.
[The AH is] only in it for the payments. [The AH is] sick to death of rules & regulations [and] just wants to get on and farm. Compliance [is a] pain.
AH is very enthusiastic about the scheme and about combining conservation with production of good quality animals.
[The AH] found it interesting [and the scheme made them] more aware of wildlife, [but they] won't keep features going if no payments [are made] in future.
[The AH] wants thriving wildlife on the farm.
Blanket peat bog needs protecting. [The AH] strongly dislikes the quad bikers.
Yes, [the scheme] improved awareness of environment as a whole.
If everyone pulls together, [there will be] an improvement.

Next time that [the] scheme [is renewed], there will be knowledge about own land and its successful management.
[If there is a] new scheme, [the AH] will do [it] if [they] can.
[The AH] assumes what [they are] doing is right.

APPENDIX 5 ISSUES AFFECTING THE MONITORING AND EVALUATION PROCESS

This appendix includes some issues encountered during the project relating to provision of agreement documentation and aerial photography which have implications for data management in relation to Countryside Stewardship, the scheme following on from Environmental Stewardship from 2015. Storing data in a form that is readily accessible would ease future evaluations and save staff time, both within NE and contractors, thus potentially increasing the value of evaluations and at the same time reducing the cost.

Data issues

Data are often not held by Natural England in a readily useable format (e.g. pdf).

Agreement information was often incomplete: GIS boundary data (shapefiles), all elements of basic dossier (FEP map, agreement map, part 2, part 4, part 5).

SSSI documents are not held on Genesis, therefore all information (e.g. management plans, IoS) is not readily available. Some FEPs are incomplete because information from SSSI documentation is not always included.

Habitat condition classifications are different for the FEP and SSSIs. Without information for SSSIs it was not possible to assess the quality of condition codes for all agreements.

Data on individual agreements was supplied in dossiers consisting of a number of word and pdf documents.

This format is not conducive for data extraction and analysis as required by the scale of this project, as each file has to be searched manually and required data, e.g., for the population of the databases, copied individually.

Outputs from the internal NE QA exercise (for LM0433) were also supplied as individual word or pdf documents with no summary of scores. The content and format of these documents was not consistent, reflecting the development of the NE process.

It is recommended that data of this nature should be supplied in a database format such as Access or Excel.

Further complications were caused by the poor data quality of the dossiers:

- Files were repeatedly mislabelled with or stored under agreement names that did not correspond to the content of the files, e.g., information on a different agreement was found within.
- Within the dossiers the labelling of individual files was inconsistent, making it more difficult to find the information required.
- The structure of the files was often inconsistent, e.g., headings or labels did not appear in the same order or differed between documents.