



**Harper's Green**  
**County Wildlife Site 1047**  
**Management Plan**

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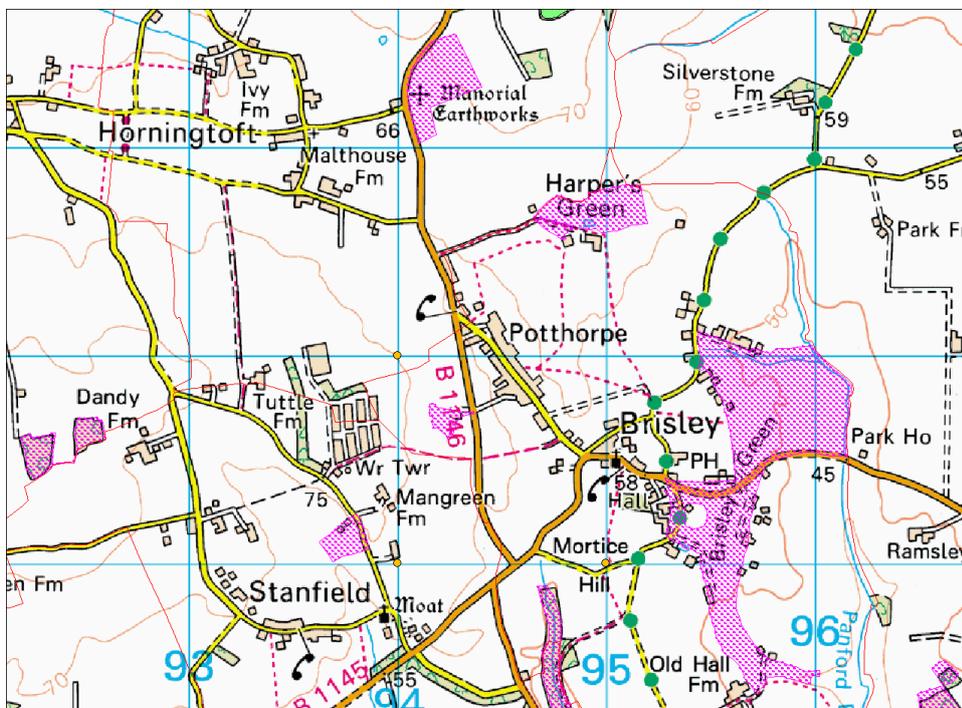
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## 1. Background

This management plan refers to parcel of land known as Harper's Green, Brisley. The location of the site is shown in map 1. It lies midway between two other County Wildlife Sites, the large common at Brisley Green and Horningtoft Manor, an area of grassland overlying manorial remains. The site is approximately 9ha.

In 1984, Harper's Green was notified as County Wildlife Site 1047, this notification being based on the species-rich neutral and acid grassland and the species-rich, marginal plants found in the permanent pond (Appendix 1). Great Crested Newt (*Triturus cristatus*) inhabits the pond and BAP bird species such as Turtle Dove (*Streptopelia turtur*), Bullfinch (*Pyrrhula pyrrhula*), Linnet (*Carduelis cannabina*), Song Thrush (*Turdus philomelos*), Yellowhammer (*Emberiza citrinella*) and Lapwing (*Vanellus vanellus*), all use the site for breeding or chick rearing. The former five bird species are dependent on the scrub and hedges on the site and the last on the open grassland areas.

The County Wildlife Site (CWS) notification highlights sites of interest for wildlife in a county context and does not carry any statutory protection, although all CWS will have some protection through the planning system and through regulations on uncultivated land.



**Map 1, Location of Harper's Green**  
Pink hatched areas show County Wildlife Sites.

## 2. History

Faden's Map of Norfolk (Lark's Press, 1989), dating from 1790, shows an area of common land but with a track bisecting the area in the north rather than the south, as presently. The area to the north of the site was a large area of woodland, which is now largely arable farmland with Horningtoft Great Wood all that remains of the once extensive woodland, and also Elmham Heath. The OS first edition map (1880s) shows Harper's Green in its present form with the track bisecting the site in the south. The large, permanent pond is marked as is some woodland in the northeast corner, close to the current woodland copse.

Aerial photos from 1946 show an area of tilled land, with the northern section divided into about five fields and two south of the track. Two ditches, one running east-west in the northeast corner which

is an obvious scrub-lined feature today, and another running north-south in the western section, which is present only as a dry ditch today, are clearly visible. The aerial photos from 1988 show scrub development over much of the area, which shows up more clearly on Google Earth (2006).

There are no historical features on the site although a Roman road runs along the south west boundary.

The site is a registered common, with grazing rights holders. There have been no planning issues on the site.

### 3. Habitats & current site condition



**Map 2 – Habitats & Sections for Management Operations**

This is an area of largely unimproved common with thick scrub growth and extensive areas of unimproved, since World War II, species-rich grassland. Some of the grassland is free-draining and neutral, although there are low-lying areas of more impeded drainage and raised areas of more acidic soils, often dominated by gorse (*Ulex europaeus*). (Species information below largely from a survey conducted in July 2009).

- The grassland (area 6) is a mixture of common bent (*Agrostis capillaris*), sweet vernal-grass (*Anthoxanthum odoratum*), Yorkshire fog (*Holcus lanatus*) and hairy sedge (*Carex hirta*). Black knapweed (*Centaurea nigra*), autumn hawkbit (*Leontodon autumnalis*) and common mouse-ear (*Cerastium fontanum*) are frequent. Rank areas are dominated by broad-leaved dock (*Rumex obtusifolius*), spear thistle (*Cirsium vulgare*) and lesser stitchwort (*Stellaria holostea*). Bog stitchwort (*Stellaria alsine*) also occurs in damp hollows, often amongst taller vegetation, such as marsh dock (*Rumex palustris*), marsh cudweed (*Gnaphalium uliginosum*),

tufted forget-me-not (*Myosotis laxa*), marsh bedstraw (*Galium palustre*) and lesser spearwort (*Ranunculus flammula*). Other species common across the site include: creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), ribwort plantain (*Plantago lanceolata*), common fleabane (*Pulicaria dysenterica*), lesser bird's foot trefoil (*Lotus corniculatus*), marsh thistle (*Cirsium palustre*) and spear thistle. Ragwort (*Senecia jacobea*) is occasional, as is common hemp nettle (*Galeopsis tetrahit*), while redshank (*Persicaria maculosa*) is common in some of the damper areas. Less abundant species include yellow rattle (*Rhinanthus minor*), common yellow sedge (*Carex demissa*) and bush vetch (*Vicia sepium*). Rough chervil (*Chaerophyllum temulum*) also occurs occasionally. Other grasses common on the site include crested dog's tail (*Cynosurus cristatus*). The damp drain which crosses the site from east to west includes brooklime (*Veronica beccabunga*), water mint (*Mentha aquatica*) and fools water cress (*Apium nodifolium*). The grassland is in unfavourable condition (HLS at least Condition B or possibly C, as area has more than 5% scrub) as the open areas are over-grazed and areas have been lost to scrub encroachment.

- Area 2 consists of scrub of high environmental value which is adjacent to a dense hedge of oak, ash, blackthorn and occasional elder. This hedge extends round most of the common except the southern edge adjacent to the track. The condition of the scrub is good, although is scored as B for HLS because of the lack of clearings.
- More than half of the northern part of Harper's Green is covered by vigorous low thickets of scrub (areas 3 & 5) forming a mosaic with the grassland. The scrub is a mixture of gorse, sloe (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*), with abundant scrambling bramble (*Rubus fruticosus* agg.) and occasional dog-rose (*Rosa canina* agg.) There are scattered semi-mature to mature trees of ash (*Fraxinus excelsior*) and oak (*Quercus robur*). The scrub in the internal parts of the Green, especially Area 3, is in unfavourable condition as the gorse has become leggy and less suitable for wildlife. It has also continued to encroach onto the grassland areas, although the horse grazing now appears to be holding this in check.
- The southern part of the common (area 1) is separated from the main area by a narrow track, which gives access to Harper's Green Farm and some dwellings, and is composed almost entirely of native scrub with a small clearing. This area will largely be allowed to develop with minimal intervention. It is in favourable condition.
- There is a small block of woodland (area 7) of ash, oak and hawthorn. The trees are in good condition but there is little ground flora.
- The large pond (area 4) in the south-east of the site, is notably for its species rich marginal vegetation, which includes water plantain (*Alisma plantago-aquatica*), toad rush (*Juncus bufonius*), reedmace (*Typha latifolia*), ladies smock (*Cardamine pratensis*), wavy bitter cress (*Cardamine flexuosa*), common spike rush (*Elocharis palustris*), marsh bedstraw, marsh foxtail (*Alopecurus geniculatus*) and greater birds foot trefoil (*Lotus pedunculatus*). A small amount of scrub occurs to the north of the pond and is dominated by willow (*Salix* spp.), hawthorn and bramble. This pond is in good condition,

#### 4. Vision for Harper's Green CWS

During the timeframe of the proposed Higher Level Stewardship (HLS) agreement, it is envisaged that the larger, northern section of Harper's Green will show an increase in the grassland area, although much of the scrub will be retained and managed for BAP farmland bird species. This will be achieved by more controlled grazing and cutting and chemical treatment of scrub stumps to prevent regrowth. The scrub-enclosed temporary ponds will be opened up. The scrubby area (area 2) adjacent to the mature hedge along the western and northwestern sides will be managed

to provide a range of successional stages as will the internal scrub (area 5). The remaining scrub (Area 3) will be cleared back to grassland.

The southern section of Harper's Green (area 1), will receive less management, although the clearing in the thick scrubby area will be maintained. The permanent pond (area 4) will be managed to retain it in its current condition.

The site is little used by locals so access to the site will be improved to increase usage.

## **5. Aim of management plan**

The aim of this management plan is to set out a methodology for restoring more of the site to species-rich grassland, with associated well-managed scrub, and to maintain it in a sustainable, cost-effective manner, in accordance with the aspirations of the proposed HLS agreement.

Lowland meadows and acid grassland are priority habitats for biodiversity work in Norfolk. Several important BAP species occur on the site, including Great Crested Newt and several Farmland bird species.

## **6. Conservation priorities & aims of management work**

- To increase the amount of open habitat available to grassland flora by managing, and where appropriate, removing scrub.
- To manage areas of open neutral and dry acid grassland within Harper's Green; this management needs to be capable of being sustained over time and be cost-effective.
- To meet the requirements of the HLS scheme; these are set out in Appendix 2 and include ensuring benefits to the following features; neutral and acid grassland plants; marginal aquatic vegetation and farmland birds.
- To create greater structural and age diversity within areas of gorse and other scrub, benefiting a greater range of wildlife, including several BAP farmland bird species, such as Turtle Dove, Linnet, Bullfinch and Yellowhammer.
- To maintain the permanent pond in its current condition to benefit marginal and aquatic plants and wildlife, such as Great Crested Newt.
- To improve knowledge of access arrangements and increase usage of the site by local people

## **7. Indicators of Success**

- By year 3, cover of invasive scrub in Area 3 will have been removed.
- By year 5, there should be a wide range of age classes of scrub present in Areas 2 and 5.
- By year 10
- By year 10

These indicators are set out in the HLS agreement, part of which is summarized in Appendix 2

## **8. Constraints**

**Higher Level Stewardship.** Appendix 2 sets out specific constraints that are likely to be required by an HLS agreement. These involve no agricultural improvement of the grassland through ploughing and reseeded or installation of new drainage and preventing heavy poaching of the site by livestock (this is only likely to occur around the pond and feeding/bedding areas).

**Practical Restrictions.** The main practical constraint is likely to be to organising and maintaining the correct level of grazing. This is because the area is currently over grazed by horses and there could be some resistance to reducing grazing pressure, while at the same time introducing cattle. As the site is relatively small and isolated there could be issues in obtaining cattle for grazing. It is also important to determine the correct ongoing levels of grazing to prevent scrub encroachment while helping flowering plants to develop.

If cattle are introduced the fencing will have to be repaired to prevent them escaping into the arable areas to the north, especially, but also to the south. This may be done outside of the HLS application.

Clearance of the well-established scrub is likely to be a lengthy process.

**Access.** The site is open access land, but access could be improved by the installation of two basic stiles.

**Historic Environment Record.** There are no known historical or archaeological features on the site.

## 9. Management Prescriptions

Conservation Priorities	Prescriptions	Year/s	Timing	Who to deliver	Details
<i>Maintain and increase the extent of species-rich grassland</i>	Introduce programme of more controlled, seasonal grazing by cattle instead of or as well as horses (area 6).	1-10	Grazing April to October	graziers	Prior to grazing by cattle, fencing in the north east corner and southern and eastern sides should be repaired. Use a standard grazing rate of 1LU/ha; this to be adjusted in the light of effect on scrub encroachment and grassland enhancement.
<i>Reduce poaching</i>	Remove grazing in winter to eliminate need for supplementary feeding. If some supplementary feeding still required move location around the site to reduce poaching.	1-10	April to October	graziers	Currently grazer has horses on site throughout the year and the grassland is over grazed. By restricting grazing to the summer and autumn grazing pressure should be reduced and the need for supplementary feeding should be minimised. Some poaching is good for plant recolonisation.
<i>Reduce the area of gorse scrub</i>	Gorse scrub blocks primarily at western end (area 3) to be cut and stumps	1-3	Outside bird breeding season (1	Contractor	See map 2 for details. Area 3 to be cleared and area 5 to be managed. Gorse scrub to be cut and stumps

	chemically treated to prevent regrowth.		March to 31 August)		treated; small areas to be treated each year so that over a period of 3 years all areas to be managed have been cut and treated. Scrub around temporary ponds to be opened up first. Gorse at western end to be main target but also block of scrub at eastern end and smaller clumps to the east and any encroachments.
<i>Maintain clearing in dense scrub</i>	Clearing in scrub south of road (area 1) to be kept open by regular cutting.	1, 5, 9	Outside bird breeding season (1 March to 31 August)	Contractor	Cut regularly and remove cuttings
<i>Management of the edge of the high environmental scrub</i>	Coppicing of scrub along edge (area 2) to maintain a varied age structure to the scrub	1-10	Outside bird breeding season (1 March to 31 August)	Contractor	See map 2 for detail. Edges of scrub along western and north western boundaries to be cut in rotation over a period of five years and where appropriate clearings to be developed.
<i>Management of the scrub along the temporary wet ditch</i>	Ensure grazing prevents encroachment of scrub strip along wet ditch (part of area 5) into grassland (area 6) and gaps in line of scrub are kept open	1-10	Outside bird breeding season (1 March to 31 August)	Grazier	No direct management may be necessary if grazing ensures no encroachment out from linear strips into grassland and gaps are maintained by animals pushing through. Otherwise gaps to be maintained by cutting and any encroachment into grassland to be cut and treated.
<i>Management of permanent pond (area 4)</i>	Management to maintain <i>status quo</i> of water quality, water plants and scrub and to recolonise poached area	1-10	Outside bird breeding season (1 March to 31 August)	NWT	Scrub to be maintained at current level. Water plants to be maintained at current levels; some plant clearance may be required to maintain extent of open water.
<i>Review Implementation Plan</i>	Review effects of grazing and scrub management against targets and adjust plan accordingly	5	Anytime	Parish Council, graziers and NWT	Plan to be modified in light of successes and failures of plan.

## **10. Detailed specifications for management tasks**

### **Grazing grassland**

Grazing is preferable to cutting for hay as it is cheaper and animals produce a mosaic of long and short vegetation, they remove highly palatable but vigorous grasses and favour some plants over others. Grazing should take place between April and October, but this period and intensity (starting at about 1LU/ha) of grazing should be adjusted annually, dependent on the control of scrub encroachment achieved. Conversely overgrazing and heavy poaching must be avoided. Grazing should involve cattle or a combination of cattle and horses.

### **Stump treatment**

Stumps should be treated with an approved product at the approved rate and dyed to confirm treatment. Statutory precautions must be followed. If time permits stumps should be grooved, at 90° to the sloping cut, to increase penetration and to avoid runoff. A minimum kill rate of 90% is expected. Treatment should follow within 90 min of the cut being made and no rain should fall within 6h.

### **Gorse spraying (for emergent gorse up to 1m)**

Required?

### **Waste disposal**

Brush from cut scrub should be chipped and ideally removed from the site, or failing that burnt or piled up to rot. Burn sites should be restricted to one or two locations, reused each year. Burn sites should be protected with tin and the resulting ash should be removed.

## **11. Contractors**

Suitable contractors for capital and maintenance work to be discussed with NWT.

## **12. Grazing contacts etc**

NWT are able to provide information on additional graziers if required.

## Appendix 1 CWS Citation

### County Wildlife Site (Ref No: 1047)

**Site Name: Harper's Green**  
**Grid Reference: TF 953227**  
**District: Breckland**

**Parish: Brisley**  
**Area: 8.44 ha**

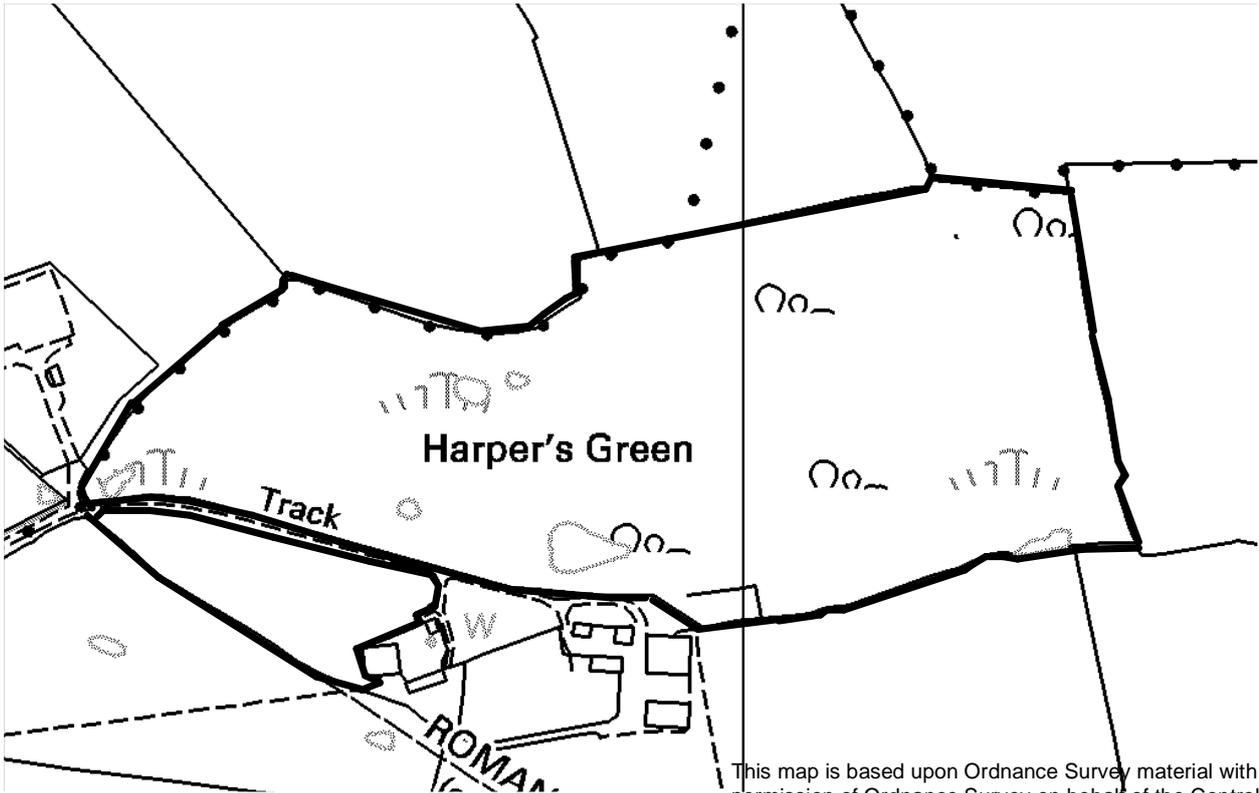
#### Site Description:

This is an area of largely unimproved common thick scrub growth and extensive areas of unimproved, species-rich grassland. Most of the grassland is free-draining and neutral, although there are low-lying areas of more impeded drainage and raised areas of more acidic soils, often dominated by gorse (*Ulex europaeus*). The turf is a mixture of common bent (*Agrostis capillaris*), sweet vernal-grass (*Anthoxanthum odoratum*), Yorkshire fog (*Holcus lanatus*) and hairy sedge (*Carex hirta*). Black knapweed (*Centaurea nigra*), autumn hawkbit (*Leontodon autumnalis*) and common mouse-ear (*Cerastium fontanum*) are frequent. Rank areas are dominated by broad-leaved dock (*Rumex obtusifolius*), spear thistle (*Cirsium vulgare*) and lesser stitchwort (*Stellaria holostea*). Bog stitchwort (*Stellaria alsine*) also occurs in damp hollows, often amongst taller vegetation, such as marsh dock (*Rumex palustris*), marsh cudweed (*Gnaphalium uliginosum*), tufted forget-me-not (*Myosotis laxa*), marsh bedstraw (*Galium palustre*) and lesser spearwort (*Ranunculus flammula*).

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Much of the northern part of Harper's Green is covered by vigorous low thickets of scrub forming a mosaic with the grassland. The scrub is a mixture of gorse, sloe (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*), with abundant scrambling bramble (*Rubus fruticosus* agg.) and occasional dog-rose (*Rosa canina* agg.) There are scattered semi-mature to mature trees of ash (*Fraxinus excelsior*) and oak (*Quercus robur*). Oak and ash also grow occasionally amongst other scrub and as more mature trees in the hedge which crosses part of the site. The north, east and west boundaries of the site consist of tall, dense mature hedges of blackthorn, oak, ash and occasional elder. The southern part of the common is separated from the main area by a narrow track, and is composed almost entirely of native scrub.

The large pond in the south-east of the site, is notably for its species rich marginal vegetation, which includes water plantain (*Alisma plantago-aquatica*), toad rush (*Juncus bufonius*), reed-mace (*Typha latifolia*), ladies smock (*Cardamine pratensis*), wavy bitter cress (*Cardamine flexuosa*), common spike rush (*Elocharis palustris*), marsh bedstraw, marsh foxtail (*Alopecurus geniculatus*) and greater birds foot trefoil (*Lotus pedunculatus*). A small amount of scrub occurs to the north of the pond and is dominated by willow (*Salix* spp.), hawthorn and bramble.



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## **Appendix 2 Higher Level Stewardship Prescriptions**

### **2.1 HK7 – Restoration of Species-rich, Semi-natural Grassland**

#### **General Description**

This option is used for restoring grasslands that were species-rich in the past but have suffered from management neglect or have been agriculturally improved. Grasslands that are suitable for this option may still have some diversity of grasses and flowers, as is the case for Harper's Green. Potential for this option will also depend on soil type, pH and soil nutrient status, particularly the amount of phosphorus.

#### **Management Requirements**

Management must include:

- Grazing and/or cutting for hay
- No ploughing, reseeded or installation of new drainage
- No heavy poaching
- Scrub clearance
- Need for supplementary feeding will be tailored to the site

### **HC15 – Maintenance of Successional Areas & Scrub**

#### **General Description**

This option is used to provide structure in valuable scrub habitats. It can also be used to enhance habitats for specific target species, such as some farmland bird BAP species.

#### **Management Requirements**

Management must include:

- Allow scrub to develop naturally
- Use grazing to restrict scrub encroachment
- Coppicing and stump treatment to prevent regrowth

### **HQ2 – Maintenance of Ponds of High Wildlife Value (>100m<sup>2</sup>)**

#### **General Description**

These options are targeted at ponds that are of particular value to wildlife, either because they support rare or threatened species (such as Great Crested Newt) or because of the diversity of wildlife that is present.

#### **Management Requirements**

Management must include:

- Retaining the current pond profile
- Retaining submerged or partially submerged dead wood
- Allowing natural draw-down to occur

It must exclude:

- Topping up water levels
- Altering the drainage of the pond or adjoining land in any way
- Use of any pesticides or fertilisers within 6m of the pond
- Introducing any plants, animals or waterfowl
- Feeding any waterfowl

## **2.2 HLS - Management of environmental features**

*General conditions on all HLS agreement land.*

On your HLS agreement land you must follow the general management conditions set out below, unless specifically stated otherwise in a subsequent section of this agreement. HLS agreement land is all land on which Higher Level Stewardship management prescriptions apply, including items within a Capital Works Plan:

- Do not apply lime.
- On the conventional land that you manage: do not apply pesticides, except for the control of spear thistle, creeping thistle, curled dock, broad-leaved dock, common ragwort, nettles or other undesirable species named in your agreement. Herbicides may only be applied to these species by weedwiper or by spot treatment.
- Do not allow your agreement land to be levelled, infilled, used for the storage or dumping of materials or used by motor vehicles or machinery (except where necessary for the management of the land), if this is likely to cause long-term damage from rutting or compaction of the soil, or otherwise damage areas being managed under the scheme.
- Do not light fires (including burning brash or cuttings) where they could cause damage to features of archaeological or historic interest, or within ten metres of tree canopies or on any areas managed for their wildlife habitat interest. (This does not restrict your ability to manage heathland vegetation by controlled burning in compliance with the Heather and Grass Burning Regulations 1986 and accompanying Code.)
- Do not allow your agreement land to be used for organised games or sports, rallies, camping or caravanning, shows or sales where this is likely to damage areas being managed for their wildlife habitat interest or features of archaeological or historic interest; where this is likely to cause excessive or unreasonable disturbance to wildlife being encouraged under your agreement; or where this would cause unreasonable restriction to Public Rights of Way or "access land" as designated under the Countryside and Rights of Way Act 2000.
- Do not carry out or permit metal detecting or archaeological fieldwork on any of the archaeological sites on your holding identified in your Farm Environment Plan, unless agreed with your Natural England adviser in writing. In some cases derogation will also be required.

### **HC15 - Maintenance of successional areas and scrub**

Land parcels and associated features managed under this option:

RLR Field Number: TF94229369

Features: SB02 Bullfinch, SB06 Kestrel, SB08 Linnet, SB13 Song Thrush, SB16 Turtle Dove, SB18 Yellowhammer, SH01 Great Crested Newt, V05 Scrub of high environmental value

#### **General description of the management required:**

The aim of this option is to maintain habitat mosaics at the field and landscape scale for specific BAP species and to protect soils and watercourses. It is also suitable adjacent to woodland to enhance or maintain the quality of the woodland edge environment and to maintain scrub on limestone pavement. This option is not appropriate on archaeological sites, or where scrub will be detrimental to the landscape. The option will require some form of regular management of vegetation, such as extensive grazing, on part or all of the site to maintain suitable conditions for species and to prevent the development of woodland. The option may require the exclusion of livestock in some or all years.

#### **Indicators of Success**

- The agreed management plan is being followed closely.
- In all years, cover of shrub species Hawthorn, Blackthorn, Gorse, Elder and dense bramble stands should be more than that shown in the HLS options map produced in March 2012.
- By year 5, shrub species of Hawthorn, Blackthorn, Gorse and Elder should have a diverse age and height structure. No more than 50% of the scrub area should be mature, or over mature.
- In all years there should be evidence of Turtle Dove, Yellowhammer, Bullfinch, Linnet and Song Thrush using the site for foraging and/or breeding.

## **Management Prescriptions; the dos and don'ts of management**

The following rules apply across the whole area being managed under this option.

- Graze lightly with cattle, sheep and horses/ponies in all years to maintain areas of closely grazed turf interspersed with taller tussocks. Stocking levels should be such that some light grazing of young scrub occurs but without overgrazing the species rich grassland. Avoid poaching by managing stock carefully when ground conditions are wet.
- Do not apply fertilisers, organic manures or waste materials (including sewage sludge).
- Supplementary feeding is not permitted on areas of cleared scrub, existing scrub or species rich grassland.
- There must be no ploughing or other cultivation such as reseeded, rolling or chain harrowing.
- Unless otherwise agreed with your Natural England adviser, all mature or over-mature standing trees and all standing and fallen deadwood must be retained, unless it is a genuine safety hazard. Tree surgery must be limited to that required for the safety of people and livestock.
- There must be no new drainage or modification/improvement to existing drainage systems. Existing drains can be maintained.
- To benefit Great Crested Newts the land within a 200m radius of a breeding pond must be managed extensively and no new barriers such as buildings, walls, tracks, or footpaths created. Potential hibernation sites such as rabbit burrows, log piles, rocky areas or woodland should be retained. Consult your Natural England adviser and get agreement in writing before starting any management operations.
- In year 1 to 10, follow a programme of rotational scrub management as set out in the Management plan and as agreed in writing with your NE adviser. Never manage more than a 10th of the scrub on the site in any one year and never completely eradicate scrub from the site.

## **PART 5**

### **Capital works specifications**

#### **Introduction**

The specifications set out below describe the minimum standard of work for the capital items set out in Part 4 of your Environmental Stewardship Agreement. If you do not follow these specifications we cannot pay you for the work.

All capital works must be completed and maintained to the standard required to perform their intended function for the duration of the agreement. If this agreement replaces an existing or expired CSS, ESA or ES agreement, you must take all reasonable care to protect, for the duration of this new agreement, any capital works which you have completed and for which you have been paid under that agreement.

#### **Health and Safety**

The requirements of health and safety and other current legislation and codes of practice must be observed in all work undertaken, in particular in all cases where pesticides are used.

#### **Permissions**

The offer of a Stewardship agreement is a permission from Natural England to undertake the work on SSSI land under Section 28E of The Wildlife and Countryside Act 1981 (as amended).

However, additional permissions from other organisations may be required. The following are examples of permissions that may be necessary:

- On a Scheduled Ancient Monument - Scheduled Ancient Monument Consent, from English Heritage.
- Pond creation, restoration, scrape creation, restoration, and ditch work - may require an Impoundment Licence or Abstraction Licence from the Environment Agency, Planning Permission from the planning authority, and permission from the Internal Drainage Board where these are present.
- Obstructions to water courses or in the floodplain. This includes disposal of spoil from ditches, scrapes and ponds, tree planting, otter holts, car parking, erecting sluices and river gates and fencing - permission from the Environment Agency.
- Works in a Conservation Area - consent from the Planning Authority

- Tree Preservation Order - consent from the local authority
- Tree felling, pollarding, hedgerow works, coppicing bankside trees - may require a felling licence from the Forestry Commission.
- Chemical bracken control - near water course will require permission from the Environment Agency
- Areas for parking cars, hard standing, earthworks - may require planning permission from the Planning Authority
- Proposed changes to the existing type of stile or gate on a right of way - consent from the Highway Authority

## **MANAGEMENT PLAN PREPARATION**

A management plan must be prepared following the brief given below. The plan should be submitted to your Natural England contact by September 2012. Any work identified in the management plan must not be started until it has been agreed with your Natural England contact.

Give a brief overview of the site and the management objectives.

Provide a detailed methodology for scrub control, including the method of removal and disposal of cut material.

Provide a series of maps detailing areas that scrub should be eradicated.

Provide a series of maps showing areas where scrub will be restructured each year.

Provide a discussion and actions for any pond management that may be required, including looking at restoring further ponds within the site.

Provide a list of actions.

## **SCRUB MANAGEMENT**

### **General**

For the purposes of this grant, scrub means any woody shrubs including European gorse, bramble and young trees. Dwarf and Western gorse are integral components of heathland and should not be included in this item. A management plan is usually required before carrying out work on significant areas of scrub. The plan must be agreed in advance with your Natural England contact and the work carried out accordingly. You must ensure any relevant consents are obtained before carrying out the work e.g. consent from English Heritage for work on a Scheduled Monument and the Natural England SSSI specialist for work in a SSSI.

### **Timing**

Work must be done between 1 October and 28 February, outside the bird-nesting season.

### **Scrub control**

Techniques for removing scrub include flailing, using a chain saw and clearing some species (e.g. birch or pine) by hand.

Controlling scrub by burning is not acceptable unless it is specifically agreed with your Natural England contact.

Cut scrub down to ground level without disturbing the roots and leaving no protruding stems. Care must be taken to avoid uprooting adjacent grassland or heathland plants. Stumps must not be removed unless specifically agreed with your Natural England contact. In exceptional circumstances and where agreed with your Natural England contact, it may be necessary to remove large stumps using mechanical equipment. Under no circumstances is scrub burning or stump removal to be undertaken on sites of archaeological interest.

### **Controlling scrub regrowth**

Regrowth should be controlled for the duration of the agreement only where the aim of the work is scrub reduction or eradication. Management work to diversify the age range and structural diversity of scrub stands may be seeking to encourage growth from cut stumps. This detail should be included within the management plan. Where regrowth is to be controlled it may be achieved by mechanical methods such as flailing or livestock grazing, or by chemical treatment. In cases where

herbicides are applied to control regrowth you must observe the requirements of current legislation. You must also refer to the manufacturer's guidance on application rates and safety requirements. Herbicides must be applied with extreme care to ensure the grassland or heath vegetation is not affected.

**Disposal of cut material**

Dispose of cut material by removing it from the site, tidying it into piles or burning. Bonfire sites must be far enough away from trees to avoid causing damage and at least 10m from the crown of any tree. Burning sites and piles of wood must not be on patches of ground where they could damage species rich grassland, anthills or other ecological or archaeological features. The area used for burning must be agreed in advance with your Natural England contact and cleaned up as soon as possible after burning. Burning on a metal sheet reduces damage to the soil and makes it easier to remove ash from the site. As the site regenerates the growth of nettle, thistle, dock, ragwort and other weed species must be controlled. Follow the management plan maps and methodology.