



Wild Pollinator & Farm Wildlife Packages

*Managing for farmland biodiversity
across lowland England within
Countryside Stewardship*

James Phillips, National Species Recovery Programme

www.naturalengland.org.uk

Talk outline

- **Introduction**
- **Origins & policy drivers**
- **Design criteria & approach**
- **What are the packages – Mid & Higher Tiers**
- **Targeting and scoring for the packages**
- **Questions and discussion**



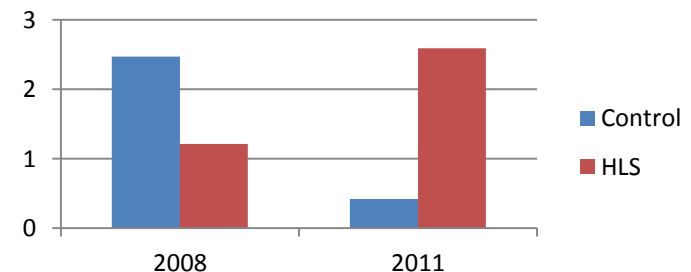
Origins

Success of **Farmland Birds Packages** within ES, especially within HLS:

- Increased **uptake** of ‘unpopular’ in-field arable options
- Better **balanced** agreements, especially in HLS
- Evidence of **biological (bird) responses** at farm and landscape-scale from BTO and RSPB studies



Tree sparrow



Policy drivers



- *Biodiversity 2020* Outcome 3 (improve species status) and Outcome 2B (200,000 ha of priority habitat creation, which includes an additional 60,000 ha of ‘arable field margins’)
- International legislative commitments, especially EU *Birds Directive*
- Defra’s *National Pollinator Strategy: for bees and other pollinators in England*
- Contribute to other CS objectives in the wider countryside (especially ecosystem services, climate change adaption and water quality)

Design criteria



- Focussed on the resource needs of wild pollinators and birds, but delivering as best we can for *all* priority biodiversity on lowland farmland
- Work within both the Mid Tier and Higher Tier of CS
- Evidence-based (as far as is possible), practical and straight-forward to understand and deliver
- Mix of compulsory ('essential') and optional elements
- Can be tailored to local situations (landscapes)
- Can be targeted geographically to maximise cost effectiveness

Design approach



Design based around the provision *Essential* and *Optional* resources for biodiversity:

- *Essential* – ‘must dos’ to provide the needs of wild pollinators and priority birds. Development of ‘Big 3 ‘ approach for birds:

1. **nectar and pollen sources/chick-food**
2. **overwinter seed food, and**
3. **suitable breeding/nesting habitat**



- *Optional* - at discretion of the agreement holder (eg skylark plots).
- Mostly ‘in-field’ options, but also others (eg hedgerows), with set minimum and maximum quantities, where necessary
- Slightly different list of options, and quantities for Mid and Higher Tiers...

Packages in the Mid Tier



- choose from groups of options suitable for three different farm types – **arable, pastoral and mixed**
- emphasis on providing the essential resources for wild pollinators and farmland birds *with the minimum disruption to the farm*
- small number of additional options that can be selected by the applicant
- Minimum area of ‘farmed land’ to deliver the package will be c. **3%** (higher if stubbles are used to provide the winter bird food resources)
- Available in **all 151** essentially lowland NCAs in England, but...
- Holdings that coincide with ‘hotspots’ for wild pollinators and farmland birds (based on tetrad-level distribution data) will get bonus points in the scoring.

Mid Tier Arable Package

Resources for Wild Pollinators and Farm Wildlife:	Select one or more of the following Countryside Stewardship options:	Minimum quantity required per 100 ha of farmed land ¹	Maximum quantity required per 100 ha of farmed land ²
Nectar and pollen sources for insect pollinators and insect-rich foraging for birds	AB1 Nectar flower mix AB8 Flower-rich margins and plots AB15 Two-year sown legume fallow AB16 Autumn sown Bumblebird mix AB11 Cultivated areas for arable plants (<i>no more than 25% of the total resource area</i>)	1 ha (2ha) in total	3 ha (6 ha) in total
Winter food for seed-eating birds	AB9 Winter Bird Food (or OP2 Wild bird seed mixture) Can also select up to 5 ha (15ha) per 100 ha of AB6 Enhanced Overwinter Stubble <u>or</u> up to 10 ha per 100 ha of AB2 Basic Overwinter Stubble (or OP1 Overwintered stubble), but this can only comprise up to half (50%) of seed food resource provided when applying the 'environmental currency multiplier' (ie must be a minimum of 1 ha/100 ha of AB9)	2 ha (4ha)	3 ha (6 ha)
Hedgerows	BE3 Management of hedgerows	500 m	2000 m
In-field breeding habitats for skylarks in winter cereal-dominated landscapes	AB4 Skylark plots	2 per ha of winter wheat	2 per ha of winter wheat
Ponds and ditches	WT2 Buffering in-field ponds and ditches on arable land	as required	as required

Mid Tier Pastoral Package

Resources for Wild Pollinators and Farm Wildlife:	Select one or more of the following Countryside Stewardship options:	Minimum quantity required per 100 ha of farmed land ¹	Maximum quantity required per 100 ha of farmed land
Nectar and pollen sources for insect pollinators	GS4 Legume and herb-rich swards (or OP4 Multi-species ley) GS2 Permanent grassland with very low inputs (outside SDA	2 ha in total	4 ha in total
Nesting habitat for insect pollinators and birds	GS1 Take field corners out of management (outside SDA) ²	0.5 ha	2 ha
Hedgerows	BE3 Management of hedgerows	500 m	2000 m
Variable grassland sward structure to provide insect-rich foraging for birds	GS17 Lenient grazing supplement	1 ha	4 ha
Winter food for seed-eating birds	GS3 Ryegrass seed-set as winter/spring food for birds	2 ha	3 ha
Ponds and ditches	WT1 Buffering in-field ponds and ditches in improved grassland	as required	as required

Mid Tier Mixed Farm Package

Resources for Wild Pollinators and Farm Wildlife:	Select one or more of the following Countryside Stewardship options:	Minimum quantity required per 100 ha of farmed land ¹	Maximum quantity required per 100 ha of farmed land ²
Nectar and pollen sources for insect pollinators and insect-rich foraging for birds	AB1 Nectar flower mix AB8 Flower-rich margins and plots AB15 Two-year sown legume fallow AB16 Autumn sown Bumblebird mix AB11 Cultivated areas for arable plants (<i>no more than 25% of the total resource area</i>) GS4 Legume and herb-rich swards (or OP4 Multi-species ley) (<i>2 ha minimum, 4 ha maximum</i>) GS2 Permanent grassland with very low inputs (outside SDA) (<i>1 ha minimum, 2 ha maximum – ie there must be at least 1 ha of other options</i>) GS17 Lenient grazing supplement	1 – 2 ha (2-4ha) in total	3 ha (6 ha) in total
Winter food for seed-eating birds	AB9 Winter Bird Food (or OP2 Wild bird seed mixture) GS3 Ryegrass seed-set as winter/spring food for birds Can also select up to 5 ha (15ha) per 100 ha of AB6 Enhanced Overwinter Stubble or AB13 Brassica fodder crops <u>or</u> up to 10 ha per 100 ha of AB2 Basic Overwinter Stubble (or OP1 Overwintered stubble) or AB7 Whole crop cereals, but this can only comprise up to half (50%) of seed food resource provided when applying the ‘environmental currency multiplier’ (ie must be a minimum of 1 ha/100 ha of AB9 or GS3)	2 ha (4 ha)	3 ha (6 ha)
Hedgerows	BE3 Management of hedgerows	500 m	2000 m
Ponds and ditches	WT1 Buffering in-field ponds and ditches in improved grassland WT2 Buffering in-field ponds and ditches on arable land	as required	as required

The Higher Tier Package



- Applicants choose from a slightly expanded list of options that target a broader range of farmland species and habitats, although the essential resources for wild pollinators and farmland birds must be provided.
- In addition, the applicant and NE adviser will look at the possibilities for delivering further options that will enhance the delivery of the agreement for farmland biodiversity (**'negotiated' resources**).
- Minimum area of farmed land to deliver the Higher Tier package will be c. **5 - 10%** (note: higher if stubbles are used for winter bird food).
- Applicants invited to consider a Higher Tier package where past AES investment has managed land for the benefit of farm wildlife (notably, through an expiring HLS agreement), or in areas where priority farmland species are present.

Higher Tier Package – essential resources

Resources for Wild Pollinators and Farm Wildlife:	Select one or more of the following Countryside Stewardship options:		Minimum quantity required per 100 ha of farmed land ¹	Maximum quantity required per 100 ha of farmed land
Nectar and pollen sources for insect pollinators and insect-rich foraging for birds	To provide at least 0.5 ha of flowering habitat in spring:	BE3 Management of hedgerows WD3 Woodland edges on arable land AB9 Winter Bird Food (or OP2 Wild bird seed mixture) (<i>year 2 of mixes containing kale only</i>) AB11 Cultivated areas for arable plants (<i>autumn cultivated or spring cultivated left until the following spring only</i>)	<p align="center">2ha – 4ha²</p> <p>ideally, as a mixture of legume-based (eg AB1), perennial (eg AB8) and annually cultivated areas + <u>either</u> BE3, WD3 &/or AB9 with kale <u>or</u> AB11 (that is spring cultivated and left until the following spring)</p>	
	To provide at least 1 ha of flowering habitat in summer:	AB1 Nectar flower mix AB8 Flower-rich margins and plots AB15 Two-year sown legume fallow AB16 Autumn sown Bumblebird mix AB11 Cultivated areas for arable plants GS4 Legume and herb-rich swards (or OP4 Multi-species ley)		
	To provide at least 0.5 ha of flowering habitat in autumn:	AB1 Nectar Flower mix (<i>the half that is cut</i>) AB8 Flower rich margins and plots GS4 Legume and herb-rich swards (or OP4 Multi-species ley)		
Nesting habitat for insect pollinators and birds	AB8 Flower rich margins and plots (<i>on fertile soil only</i>) SW1 4-6m buffer strip on cultivated land AB11 Cultivated areas for arable plants AB3 Beetle banks GS17 Lenient grazing supplement on GS13 Management of grassland for target features GS1 Take field corners out of management (outside SDA) WB1 Small wildlife box, WB2 Medium wildlife box, WB3 Large wildlife box (<i>capital items</i>)		<p align="center">1 ha</p> <p>as a mixture providing both tussocky grass and bare ground (undisturbed from March until February the following year)³</p>	
Winter food for seed-eating birds	AB9 Winter Bird Food (or OP2 Wild bird seed mixture) GS3 Ryegrass seed-set as winter/spring food for birds Can also select up to 5 ha per 100 ha of AB6 Enhanced Overwinter Stubble or AB13 Brassica fodder crops <u>or</u> up to 10 ha per 100 ha of AB2 Basic Overwinter Stubble (or OP1 Overwintered stubble) or AB7 Whole crop cereals, but this can only comprise up to half (50%) of seed food resource provided when applying the 'environmental currency multiplier' (ie must be a minimum of 1 ha/100 ha of AB9 or GS3)		2 ha	5 ha

Higher Tier Package – negotiated resources

Resources for Wild Pollinators and Farm Wildlife:	Select one or more of the following Countryside Stewardship options:	Minimum quantity required per 100 ha of farmed land ¹	Maximum quantity required per 100 ha of farmed land
Hedgerows and in-field trees	BE3 Management of hedgerows BE1 Protection of in-field trees on arable land BE2 Protection of in-field trees on intensive grassland	500 m n/a n/a	2000 m n/a n/a
Habitat for rare/scarce arable flora (also can deliver foraging habitats for pollinators and birds)	Cultivated areas for arable plants Unharvested cereal headland <i>(note: whole field fallow plots will also contribute)</i>	0.5 ha	1 ha
Targeted, non-designated established wildlife habitats⁴	WT4 Management of ponds of high wildlife value (100 sq m or less) WT5 Management of ponds of high wildlife value (more than 100 sq m) WT1 Buffering in-field ponds and ditches in improved grassland WT2 Buffering in-field ponds and ditches on arable land WT3 Management of ditches of high environmental value GS13 Management of grassland for target features GS14 Creation of grassland for target features	1 in total as required 500 m 1 ha 1 ha	5 in total as required 1000 m 5 ha 5 ha
Supplementary feeding	AB12 Supplementary winter feeding for farmland birds (or OP3 Supplementary feeding for farmland birds)	n/a	n/a
In-field breeding habitats for skylarks in landscapes dominated by winter cereals	AB4 Skylark plots	2 per ha of winter wheat	
Nesting habitats for lapwing on arable and mixed farms	AB5 Nesting plots for lapwing and stone curlew	1	5
Traditional orchards	BE4 Management of traditional orchards	n/a	n/a
Nest/roost boxes for insects, tree sparrows and bats	WB1 Small wildlife box, WB2 Medium wildlife box, WB3 Large wildlife box (<i>capital items</i>)	10	20

Targeting the packages



- The package will be targeted to those NCAs which hold populations of 3 or more of the arable six farmland bird species and/or 5 of 10 wild pollinators (as defined by 10 species of widespread declining bee species associated with England's farmed landscapes)
- In mid tier the package will be offered anywhere across 151 NCAs in England which hold assemblages of wild pollinators and farmland birds populations
- In Higher tier the package will be targeted to hotspot areas within these 151 NCAs:
 - Where populations of the Arable six and Wild Pollinator assemblage occur
 - Where there has been strong past investment and favourable land management for farmland biodiversity through existing HLS agreements e.g. HLS Farmland Bird package
 - Where bespoke priority s41 species associated with the wider countryside occur e.g. Cirl bunting, Turtle dove, Nobel chafer, Shrill carder bee, Short-haired bumblebee, Great horseshoe bat

Scoring the packages



In Mid tier

- A **base package score** will be awarded to an applicant who applies for the package in any of the Wild Pollinator and Farm Wildlife ‘priority areas’ (as defined by the 151 lowland NCAs)
- An **additional bonus score** will be awarded to applicants where the farm coincides with ‘hotspots’ for wild pollinators and farmland birds within any of the 151 priority NCAs based on tetrad-level distribution data – if the holding coincides with any part of a tetrad (a 2x2km square supporting 3/6 farmland bird species and/or 5/10 wild pollinators species) then they will get the additional bonus score for doing the full package
- If the farmer does the full package and then chooses to do an optional option (e.g. buffering of ponds) then there will be an added score for choosing to do that option. There will be an additional score for every optional option added

In Higher Tier

- Arable biodiversity hotspots will be scored in a similar way to priority habitats. Applicants qualify and score highly if the holding coincides with a hotspot for populations of farmland birds and/or wild pollinators or where there has been strong past investment and favourable land management for farmland biodiversity through an existing HLS agreement
- An additional s41 priority species score will also be given if a holding holds a bespoke s41 species



Questions & discussion



Questions?

Questions?