

**Part III.12.C**  
**Supplementary Information Sheet on Agri-environmental and animal welfare aid**

*This form must be used for the notification of any state aid measure to support agricultural production methods designed to protect the environment and to maintain the countryside (agri-environment) or to improve animal welfare covered by point IV.C. of the Community Guidelines for State aid in the agriculture and forestry sector 2007-2013<sup>1</sup> (hereinafter called "the guidelines") and articles 39 and 40 of Council Regulation (EC) No 1698/2005<sup>2</sup>.*

Does the measure concern compensation to farmers who **voluntarily** give agri-environmental commitments (articles 39(2) of Council Regulation (EC) No 1698/2005?

yes  no

- If yes, please refer to the part of this Supplementary Information Sheet (SIS) relating to "*aid for agri-environmental commitments*".

Does the measure concern compensation to farmers who **voluntarily** enter into animal welfare commitments (article 40(1) of Council Regulation (EC) No 1698/2005?

yes  no

- If yes, please refer to the part of this SIS relating to "*aid for animal welfare commitments*".

Does the aid only concern environmental **investments** (point 62 of the guidelines)?

yes  no

- If yes, please refer to SIS relating to "*Investment aids in the agricultural sector*".

Does the environmental aid pursue other objectives such as **training** and **advisory services** to help agricultural producers (point IV.K of the guidelines)?

yes  no

- If yes, please refer to SIS relating to point *IV.K* of the guidelines.
  - Others?
- Please provide a complete description of the measure(s).....

Is documentation demonstrating that the State aid fits into and is coherent with the relevant Rural Development plan attached to the notification?

yes  no

<sup>1</sup> OJ C 319 of 27.12.2006

<sup>2</sup> Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), OJ L 277, 21.10.2005, p. 1

If yes, please provide that documentation hereunder or in an annex to this supplementary information sheet

Chapter 5- agri-environment payments and Annex attached to this Supplementary Information Sheet provide this information.

.....  
If no, please note that this documentation is requested in conformity with point 26 of the agricultural guidelines.

**Aid for Agri-environmental commitments (point IV.C.2 of the guidelines)**

**1. objective of the measure**

Which one of the following specific objectives does the support measure promote?

- ways of using agricultural land which are compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity, reduce production costs;
- an environmentally-favourable extensification of farming and management of low-intensity pasture systems, improve and re-deploy production ;
- the conservation of high nature-value farmed environments, which are under threat increase quality;
- the upkeep of the landscape and historical features on agricultural land;
- the use of environmental planning in farming practice

If the measure does not pursue any of the above objectives, please indicate which are the objectives aimed at in terms of environmental protection? (Please submit a detailed description).....

If the measure in question has already been applied in the past, what have been the results in terms of environmental protection?

***Higher Level Stewardship was only introduced in 2005. An evaluation of its operation is currently being undertaken and a report of its findings is due to be available in 2007.***

**2. Eligibility criteria**

2.1. Will the aid be granted to farmers and/or other land managers (Article 39(2) of Regulation 1698/2005) who give agri-environmental commitments for a period between five and seven years?

- yes                       no

A. Will a shorter or a longer period be necessary for all or particular types of commitments?

- yes                       no

*In the affirmative please provide the reasons justifying that period*

HLS undertakings will, in most cases, run for **ten years** because of the more detailed and complex nature of the agreement and the need to deliver significant environmental benefit. Our experience of running agri-environment schemes since 1987, suggests that action over ten years is the minimum time required to deliver the required environmental benefits but in many cases ten years is often insufficient to create or restore the habitats that we desire. For example, on land with low inputs e.g. heather moorland; species rich grassland it may take many years to restore the ecological condition of the land. In these circumstances, the policy is to encourage agreement holders to renew their agreements for a further ten year period. In accordance with the provisions of Article 39(3) we will therefore be seeking to offer agreements for 10 years except as mentioned below.

In one specific case: the re-creation of inter-tidal and saline habitat (IT1) **twenty year** agreements may be undertaken where the aim is to mitigate the effects of the rise in sea levels by realigning the coastline and creating valuable saltmarsh and mudflat habitat. This is justified because the management will result in an irreversible change in land use (e.g. the creation of inter-tidal habitats) and it is appropriate to give a longer commitment in return for this permanent impact on the land

.....  
.....

B. Please confirm that no aid will be granted to compensate for agri-environmental commitments that do not go beyond the relevant mandatory standards established pursuant to Articles 4 and 5 of, and Annexes III and IV to Regulation (EC) No 1782/2003<sup>3</sup> as well as minimum requirements for fertiliser and plant protection product use and other relevant mandatory requirements established by national legislation and identified in the rural development programme.

yes  no

*If no, please note that Article 39(3) of Regulation 1698/2005 does not allow for aid for agri-environmental commitments that do not involve more than the application of these standards and requirements.*

2.4. Please describe what the above mentioned standards and requirements are and explain how the agri-environmental commitments involve more than their application.

.....

1. ES funds only those commitments that go beyond the relevant mandatory standards attached to the Single Farm Payment in England. As required under Article 39(3) of Regulation 1698/2005, from 1 January 2007 new agreement holders will be required to meet the English standards of Good Agricultural and Environmental Condition (GAEC) and comply with a number of Statutory Management Requirements (SMR) relating to the environment, public and plant health, animal health and welfare, and livestock identification and tracing. A list of the standards of GAEC and SMRs will be attached when the programme is formally submitted. These requirements are the same as the cross compliance conditions of the Single Payment Scheme and act as the baseline for which no payments are made. In accordance with the provisions of Article 39 (3) of Council Regulation No 1698/2005, agri-environment payments are only made for management that goes beyond these provisions.

2. Agreement holders are required to comply with the provisions of the Nitrates Action Programme in the Nitrate Vulnerable Zones (NVZs), which limit the use of

---

<sup>3</sup> Council Regulation 1782/2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers, OJ L 270, 21.10.2003, p. 1

organic manures and inorganic fertilisers, and the Code of Good Agricultural Practice for the Protection of Water, which applies outside the zones. No payment is made for meeting these standards. Agreement holders will be required to fully comply with the requirements of the revised Nitrates Action Programme, which is due to be agreed by mid-2007.

3. The use of inorganic and organic fertilisers on land within ES is very limited. Where appropriate, details of the maximum level of applications permitted are set out in the prescriptions for each option. These are based on the Fertiliser Recommendations for Agricultural and Horticultural Crops (RB209) that provides recommendations for the use of lime and major nutrients (N, P, K, S, Mg and Na) on most field grown crops including arable grassland, field vegetables and fruit. Agreement holders are required to keep records of the applications on a field-by-field basis.

4. Although phosphorus is not specifically addressed under the Nitrates Action Programme, it is expected to have a positive impact on phosphorus pollution. There are no other specific requirements concerning phosphorus pollution in addition to those outlined above.

5. All Plant Protection products are authorised in accordance with the provisions of the UK Plant Protection Regulations 2005, which implement the Plant Protection Products Directive 91/414. There are no EU requirements for the training, storage or the testing of machinery. However the Plant Protection Products (Basic Conditions) Regulations 1997 set out national rules for the training of all those who use, sell, supply and store pesticides. In addition, there are two statutory codes of Practice: the Code of Practice for using plant protection products, and the Code of Practice for suppliers of Pesticides to Agriculture, Horticulture and Forestry, which also sets out minimum requirements for pesticides store and how they should be built etc. There are specific rules within the codes for the spraying of plant protection products close to water courses.

6. In accordance with the provisions of Article 46 of Commission Regulation 1974/2006 agreement holders will also be required to amend their agreements to take account of any changes to cross compliance; NVZs; requirements on fertilisers and plant protection products and any other relevant mandatory requirements established by EU and national legislation.

.....

<b>3. Aid amount</b>
----------------------

3.1. Please specify the maximum amount of aid to be granted based on the area of the holding to which agri-environmental commitments apply:

- for specialised perennial crops ..... (maximum payment of 900 €/ha)
- for annual crops ..... (maximum payment of 600 €/ha)
- for other land uses .....(maximum payment of 450 €/ha)?
- local breeds in danger of being lost to farming ...(maximum payment of 200 €/live stock unit)?
- other?.....
- Please see attached Annex .
  - *If the maximum amounts mentioned are exceeded please justify the compatibility of the aid with the provisions of Article 39(4) of Regulation (EC) N° 1698/2005.*

- Please see attached Annex for justifications.

3.2. Is the support measure granted annually?

yes  no

*If no, please provide the reasons justifying other period*

.....  
.....

3.3. Is the amount of annual support calculated on the basis of:

- income foregone,
- additional costs resulting from the commitment given, and
- the need to provide compensation for transaction costs

yes  no

- *Explain the calculation method used in fixing the amount of support and specify the income foregone, additional costs and possible transaction costs*

7. Payment rates for the scheme are set in the light of calculations of Income Foregone and costs incurred by farmers/land managers in complying with the particular options and of any transaction costs incurred by land managers. Payment rates have been set in accordance with Article 27(8) of Commission Regulation 1974/2006.

8. The calculations of income forgone for Defra's agri-environment schemes are fully supported by detailed information on the basis of all the figures used. Thus, all the figures in the summarised partial budget can be traced back to the elements, such as farming systems, enterprise performance and costs. This data has been independently verified.

9. The figures included in the income forgone calculations were produced by a small group of Natural England agricultural business specialists. They used their knowledge of the local, regional, European and world markets to derive the data. Where appropriate this is based on a forecast of average output prices expected over the period that the payments would be offered. They consulted widely amongst industry analysts employed by marketing organisations and the trade in the process. Performance data is derived from a range of scientific research and empirical evidence.

10. HLS agreements are paid according to the payment rate for each option included in the agreement, and the area/length/number of the option selected. Where an HLS option is underpinned by an ELS/OELS option on the same land the payment received under ELS/OELS for that area (£1 equating to one point) will be deducted from the HLS payment to avoid paying for the same management twice. The total paid for that option on the land parcel would therefore be the same, whether the HLS option is underpinned or not.

11. Payment rates offered for each option under HLS will be based on a national income foregone calculation. These have been based on averaged figures across the country and so take no account of regional variations in cost and priority.

12. Payment rates will be reviewed regularly and any changes notified to the Commission.

3.4. Is the reference level for calculating income foregone and additional cost resulting from the commitments given, the standards and requirements as mentioned above under point 2.3?

yes  no

- *If no please explain the reference level taken into consideration*

.....  
.....

3.5. Are the payments made per unit of production?

yes  no

*If yes please explain the reasons justifying that method and the initiatives undertaken to ensure that the maximum amounts per year eligible for Community support as set out in the Annex to Regulation (EC) N° 1698/2005 are complied with.*

.....

.....

3.6. Do you intend to give aid for transaction costs for the continuation of agri-environmental commitments already undertaken in the past ?

yes  no

3.7. If yes, please demonstrate that such costs continue to be incurred

.....

3.8. Do you intend to give aid for the costs of non-productive investments linked to the achievements of agri-environmental commitments (non-productive investments being investments which should not lead to a net increase in farm value or profitability) ?

yes  no

3.9. If yes, which aid rate will be applied (max. 100 %) ?

13. Where standard payment rates are used, the average total cost has been calculated on the basis of the income foregone and costs incurred. For all investments, the percentages of total costs that will be reimbursed from the Scheme have been set using the following criteria:

Environmental benefit; in the light of current priorities given to different types of investment;

Market failure; the degree of financial assistance found necessary to encourage the work to be undertaken;

The degree of agronomic benefit.

14. This last criterion needs some further explanation. Where some capital items (e.g. boundary restoration) have an agronomic, as well as environmental benefit, then a reduced payment rate is appropriate. For items where there is little or no agronomic benefit, the rate has been set at 80-100% of cost. A payment rate of 100% is considered appropriate only where there is no economic benefit, for example the creation of ungrazed managed habitat, bat boxes, otter holts etc.

**Table 1 - Approach taken in applying the percentages to determine the standard payment rates.**

	Environmental benefit	Market failure	Agronomic benefit
100% rate	High	High	None
80%	High	Medium	None
60%	High	Medium	Some
50%	Medium	Medium	Significant

15. Using this methodology, the following percentages have been applied to calculate the proposed payment rate:

- 100% reversion work; otter holts; bat boxes; access; historic features
- 80% restoration of traditional farm buildings; sluices; bunds;

- 60% hedging; walling; gates; fruit trees; tree guards; tree surgery; livestock reintroduction items; ponds
- 50% fencing; scrub and bracken control;

16. Payments for capital work are made on an annual basis in accordance with the schedule in the Capital Works Plan. Providing that all capital work items specific to that year have been completed, along with at least 75% of the remaining work that should have been completed up to that date, and then the annual claim will be paid in full. If there is a difference between the work set out in the schedule and the work done, the schedule for the remaining years of the Plan will be revised accordingly. This flexibility will not be available in the final year of the Plan. These payments are consistent with the requirements set out in Council Regulation EC No 1698/2005 for support for non-productive investments.

**Aid for Animal Welfare commitments (point IV.C.2 of the guidelines)**

**1. objective of the measure**

For which of the following areas do the animal welfare commitments provide upgraded standards?

- water and feed closer to their natural needs;
  - housing conditions such as space allowances, bedding, natural lights;
  - outdoor access;
  - absence of systematic mutilations, isolation or permanent tethering,
  - prevention of pathologies mainly determined by farming practices or/and keeping conditions.
- (Please submit a detailed description)
- .....

**If the measure in question has already been applied in the past, what have been the results in terms of animal welfare?**

.....

**2. Eligibility criteria**

2.1. Will the aid be exclusively granted to farmers who give animal welfare commitments for a period between five and seven years?

- yes                       no

2.2 Will a shorter or a longer period be necessary for all or particular types of commitments?

- yes                       no

*In the affirmative, please provide the reasons justifying that period*

.....

.....

2.3 Please confirm that no aid will be granted to compensate for animal welfare commitments that do not go beyond the relevant mandatory standards established pursuant to Articles 4 and 5 of, and Annexes III and IV to Regulation (EC) No 1782/2003<sup>4</sup> and other relevant mandatory requirements established by national legislation and identified in the rural development programme.

- yes                       no

<sup>4</sup> OJ L 270, 21.10.2003, p. 1

*If no, please note that Article 40(2) of Regulation 1698/2005 does not allow for aid for animal welfare commitments that do not involve more than the application of these standards and requirements*

2.4. Please describe what the above mentioned standards and requirements are and explain how the animal welfare commitments involve more than their application.

.....  
.....

**3. Aid amount**

3.1 Please specify the maximum amount of animal welfare aid to be granted:

- ..... (maximum payment of €500 /live stock unit)
- 
- *If the amount exceeds € 500/live stock unit, please justify its compatibility with the provisions of Article 40(3) of Regulation (EC) N° 1698/2005*

3.2 Is the support measure granted annually?

yes                       no

*If no, please provide the reasons justifying other period*

.....  
.....

3.3 Is the amount of annual support calculated on the basis of:

- income foregone,
- additional costs resulting from the commitment given, and
- the need to provide compensation for transaction costs ?

yes                       no

- 
- *Explain the calculation method used in fixing the amount of support and specify the income foregone , additional costs, possible transaction costs and possible costs of any non remunerative capital works*

.....  
.....

3.4 Is the reference level for calculating income foregone and additional cost resulting from the commitments given, the standards and requirements as mentioned above under point 2.3?

yes                       no

- *If no please explain the reference level taken into consideration*

.....  
.....

3.5 Are the payments made per livestock unit?

yes                       no

*If no, please explain the reasons justifying the method chosen as well as the initiatives undertaken to ensure that the maximum amounts per year eligible for Community support as set out in the Annex to Regulation (EC) N° 1698/2005 are complied with.*

3.6. Do you intend to give aid for transaction costs for the continuation of animal welfare commitments already undertaken in the past?

yes                       no



3.7. If yes, please demonstrate that such costs continue to be incurred

.....

3.8. Do you intend to give aid for the costs of non-productive investments linked to the achievements of agri-environmental commitments (non-productive investments being investments, which should not lead to a net increase in farm value or profitability)?

yes

no

3.9. If yes, which aid rate will be applied (max. 100 %)?

## ANNEX

### OPTIONS THAT MAY REQUIRE STATE AID TOP-UP

**Name of item: OPTION D2 Take archaeological features currently on cultivated land out of cultivation (non-organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

#### **Aims and objectives.**

17. To help farmers adapt modern farming practices where there are archaeological features on farmed land. Extensive landscape features such as ridge and furrow and ancient field systems, are often our only record of past human activity. They cannot be replaced and once destroyed are gone forever. Cultivation can be particularly destructive to archaeological sites, and taking these features out of cultivation is an essential step in conserving them for present and future generations. The conversion of the land to grassland improves the biodiversity of the site and reduces diffuse pollution.

#### **Management prescriptions to be applied.**

##### ***This option is available on non-organic land only***

Take archaeological sites out of cultivation.

Choose a boundary which encompasses the site and provides a sensible and practical field division where necessary. This may be on the whole or part of the field where the archaeological feature is, depending on what is practical on your farm.

The area can be sown or left to regenerate, then carry out the following management:

- Do not plough or re-seed
- Manage the area as permanent grassland by grazing or mowing.
- Maintain a continuous grass sward and do not allow bare patches of soil to develop (for example, by considering carefully the regular routing and rotation of stock movements, and gathering points such as water troughs).
- Do not supplementary feed on or next to the archaeological site.
- Prevent scrub development.
- Minimise the use of heavy vehicles on the site, particularly in wet weather, to prevent damage caused by wheel rutting and compaction.
- Do not tip or dump any material on the site.
- Avoid obvious earthworks if harrowing and rolling.

## **Agronomic assumptions underlying Income Foregone Calculations.**

- Loss of in field arable crop production.
- Some savings in fixed costs possible.
- Additional costs associated with the establishment of grass cover.
- Limited hay production possible on some of the area.
- Additional site management costs.
- Additional costs of grass weed control.

**1.1.1**

**1.1.2**

### 1.1.3 Income Foregone Calculations for Option D2

	Losses	Gains	For details see appendix
	£/ha	£/ha	
<b>Extra Income</b>			
Hay production 2 tonnes at £50 on 50%		50	2.2
<b>Sub-total</b>		<b>50</b>	
<b>Costs Saved</b>			
Interest on working capital on arable		11	1.2
Savings in fixed costs		71	
<b>Sub-total</b>		<b>82</b>	
<b>Income Lost</b>			
Loss of arable gross margin	467		1.2
<b>Sub-total</b>	<b>467</b>		
<b>Extra Costs</b>			
Grass establishment	77		2
Hay making	20		2.2
Weed control on 20%	11		10
Site management	20		
<b>Sub- total</b>	<b>128</b>		
<b>Total</b>	<b>594</b>	<b>132</b>	
<b>Income Change</b>	<b>463</b>		

#### Level of proposed incentive.

Proposed points allocation: D2=460

Percentage of Income Foregone: D2=99%

**Name of item: OPTION OD2 Take archaeological features currently on cultivated land out of cultivation (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

### **Aims and objectives.**

18. To help farmers adapt modern farming practices where there are archaeological features on farmed land. Extensive landscape features such as ridge and furrow and ancient field systems, are often our only record of past human activity. They cannot be replaced and once destroyed are gone forever. Cultivation can be particularly destructive to archaeological sites, and taking these features out of cultivation is an essential step in conserving them for present and future generations. The conversion of the land to grassland improves the biodiversity of the site and reduces diffuse pollution.

19.

### **Management prescriptions to be applied.**

#### ***This option is available on organic land only***

Take archaeological sites out of cultivation.

Choose a boundary which encompasses the site and provides a sensible and practical field division where necessary. This may be on the whole or part of the field where the archaeological feature is, depending on what is practical on your farm.

The area can be sown or left to regenerate, then carry out the following management:

- Do not plough or re-seed
- Manage the area as permanent grassland by grazing or mowing.
- Maintain a continuous grass sward and do not allow bare patches of soil to develop (for example, by considering carefully the regular routing and rotation of stock movements, and gathering points such as water troughs).
- Do not supplementary feed on or next to the archaeological site.
- Prevent scrub development.
- Minimise the use of heavy vehicles on the site, particularly in wet weather, to prevent damage caused by wheel rutting and compaction.
- Do not tip or dump any material on the site.
- Avoid obvious earthworks if harrowing and rolling.

## Agronomic assumptions underlying Income Foregone Calculations.

- Loss of in field production.
- Some savings in fixed costs possible.
- Additional costs associated with the establishment of grass cover.
- Limited hay production possible on some of the area.
- Additional site management costs.
- Additional costs of grass weed control.

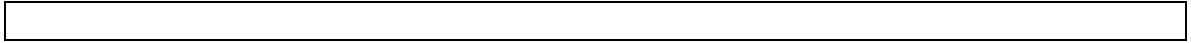
### 1.1.4 Income Foregone Calculations for Option OD2

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
Hay production 2 tonnes at £50 on 50%		50	13.2
<b>Sub-total</b>		<b>50</b>	
<b>Costs Saved</b>			
Interest on working capital		22	16.1
Savings in fixed costs		71	
<b>Sub-total</b>		<b>93</b>	
<b>Income Lost</b>			
Loss of system gross margin	720		16.1
<b>Sub-total</b>	<b>720</b>		
<b>Extra Costs</b>			
Hay making	20		13.2
Weed control	52		20.3
Site management	20		
<b>Sub- total</b>	<b>112</b>		
<b>Total</b>	<b>832</b>	<b>143</b>	
<b>Income Change</b>	<b>689</b>		

#### Level of proposed incentive.

Proposed points allocation: OD2=600

Percentage of Income Foregone: 87%



**Name of item: OPTION OE1 and OE2 : 2m, 4/6m Buffer strips on rotational land (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

### **Aims and objectives.**

Establishing grassy buffer strips alongside your field boundaries helps to extend important grassland habitats on the farm for farmland birds, insects and small mammals. By protecting these strips from sprays and fertilisers, regeneration of grasses and flowers are encouraged. Locating the strips near water courses will reduce diffuse pollution. Wider buffer strips of 6m, will increase the amount of wildlife habitat on your farm. Providing a variety of sward heights provides a range of habitats for invertebrates and small mammals such as brown hare. Adding flowers to the seed mixture will provide additional benefits.

### **Management prescriptions to be applied.**

#### ***These options are only available on organic land***

- Establish or maintain a grassy strip during the first agreement year - ideally by natural regeneration, or by sowing. Regular cutting in the first year may be needed to control annual weeds and encourage grasses to tiller.
- These strips should not receive any fertilisers or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- After the first year, cut strips only to control woody growth, and no more than one year in five (where next to woodland, one year in ten)
- Do not use buffer strips for regular access, turning or storage.
- Buffer strips must not overlap with the cross-compliance requirement of the Single Payment Scheme not to cultivate land within 2 metres of the centre of a hedgerow or watercourse.

On 6m margins, follow the management for OE1/OE2, and in addition:

- After the first year, cut the three metres abutting the crop edge annually after mid July. Only cut the other three metres to control woody growth, and no more than one year in five (where next to woodland, one year in ten).
- If you wish to, you may establish all or part of the margin by sowing a mix of fine-leaved grasses and flowers (e.g. knapweed, birdsfoot trefoil, selfheal, ox-eye daisy, yarrow). If you decide to do this, it is recommended that you cut each year in August or September and, if excess vegetation threatens to suppress the flowers, cut again in March or April. This will maintain the flowers in this sward, or others resulting from natural regeneration. You may remove cuttings, which will further benefit flowers.

### **Agronomic assumptions underlying Income Foregone Calculations.**



- Loss of headland arable gross margin.
- Land available for reduced stocking for 50% of rotation
- Establishment and management of grass margin, cutting at least twice in the first year
- Some savings in fixed costs.
- Additional weed control costs.

#### **1.1.4.1.1**

### 1.1.4.1.2 Foregone Calculations for Option OE1 and OE2

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
Reduced gross margin for 50% of rotation		120	15.3
<b>Sub-total</b>		<b>120</b>	
<b>Costs Saved</b>			
Interest on working capital		22	16.1
<b>Sub-total</b>		<b>22</b>	
<b>Income Lost</b>			
Loss of gross margin	720		16.1
Interest on working capital	<b>10</b>		15.3
<b>Sub-total</b>	<b>730</b>		
<b>Extra Costs</b>			
Grass establishment	77		13
Topping	14		13
Physical removal of weeds	52		20.3
<b>Sub- total</b>	<b>143</b>		
<b>Total</b>	881	142	
<b>Income Change</b>	<b>731</b>		

#### Level of proposed incentive.

Proposed points allocation: OE1=400, OE2=500,

Percentage of Income Foregone: OE1=55% OE2=68%

**Name of item: OPTION E5 and E6 – 2m, 4/6m buffer strips on intensive grassland (non-organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

1.2

### **Aims and objectives.**

Reducing levels of fertilisers and manure around the edge of areas of intensive grassland creates new habitat for small mammals, invertebrates and birds, and protects field boundaries and archaeological or historic features from damage by mechanical operations. This option will also reduce diffuse pollution and run-off.

### **Management prescriptions to be applied.**

#### ***These options is available on non-organic land only***

These options are available on improved grassland receiving more than 100kg/per ha of inorganic nitrogen fertiliser per year (refer to table in Annex.).

On fields which will be mown:

- Leave an uncut 2m/4m/6m buffer strip around mown grass fields; graze along with the aftermath, following the final cut.

OR

- On fields that will be grazed: do not poach or overgraze the buffer strip

In addition:

- These strips should not receive any fertilisers or manure.
- Herbicides may only be applied to spot treat or weed wipe for the control of injurious weeds (i.e. creeping or spear thistle, curled or broadleaved dock, or common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed).
- After the first year, cut strips only to control woody growth, and no more than one year in five (where next to woodland, one year in ten).
- Do not use buffer strips for regular access, turning or storage.
- It is not a requirement to fence these buffer strips.
- Buffer strips must not overlap with the cross-compliance requirement of the Single Payment Scheme not to cultivate land within 2 metres of the centre of a hedgerow or watercourse.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- Stocking rates reduced from, typically, 1.66 glu/ha to 0.5 glu/ha.
- Reduced forage costs.
- Additional weed control costs.

### 1.2.1.1.1 Income Foregone Calculations for Option E5/6

	Losses	Gains	For details see appendix
	£/ha	£/ha	
<b>Extra Income</b>			
Gross margin at 0.5 glu		184	4.4
<b>Sub-total</b>		<b>184</b>	
<b>Costs Saved</b>			
Interest on working capital on stock		38	4.3
Forage costs		104	4.3
Interest on working capital re forage		4	4.3
<b>Sub-total</b>		<b>146</b>	
<b>Income Lost</b>			
Gross margin	679		4.3
<b>Sub-total</b>	<b>679</b>		
<b>Extra Costs</b>			
Interest on working capital on stock	11		4.4
Forage costs	12		4.4
Interest on working capital re forage	1		4.4
Weed control on 5%	3		10
<b>Sub- total</b>	<b>27</b>		
<b>Total</b>	<b>706</b>	<b>330</b>	
<b>Income Change</b>	<b>376</b>		

#### Level of proposed incentive.

Proposed points allocation: E5=300, E6=400

See table at page 73 for average Income Foregone.

**Name of item: OPTION OE5 and OE6 Buffer strips on organic grassland (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

1.3

### **Aims and objectives.**

Reducing levels of fertilisers and manure around the edge of areas of intensive grassland creates new habitat for small mammals, invertebrates and birds, and protects field boundaries and archaeological or historic features from damage by mechanical operations. This option can also reduce diffuse pollution and run-off.

### **Management prescriptions to be applied.**

#### ***These options are only available on organic land***

These options are available on grassland stocked at more than 1.0 glu/ha  
On fields which will be mown:

- Leave an uncut 2m/4m/6m buffer strip around mown grass fields; graze along with the aftermath, following the final cut.

OR

- On fields that will be grazed: do not poach or overgraze the buffer strip

In addition:

- These strips should not receive any fertilisers or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- After the first year, cut strips only to control woody growth, and no more than one year in five (where next to woodland, one year in ten).
- Do not use buffer strips for regular access, turning or storage.
- It is not a requirement to fence these buffer strips.
- Buffer strips must not overlap with the cross-compliance requirement of the Single Payment Scheme not to cultivate land within 2 metres of the centre of a hedgerow or watercourse.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- Stocking rates reduced from, typically, 1.55 glu/ha to 0.44glu/ha.
- Reduced forage costs.
- Additional weed control costs.

### 1.3.1.1.1 Income Foregone Calculations for Option OE5 and OE6

	Losses	Gains	For details
	£/ha	£/ha	See appendix
<b>Extra Income</b>			
Gross margin at 0.44 glu		239	15.3
<b>Sub-total</b>		<b>239</b>	
<b>Costs Saved</b>			
Interest on working capital on stock		34	15.2
Forage costs		83	15.2
Interest on working capital re forage		4	15.2
<b>Sub-total</b>		<b>121</b>	
<b>Income Lost</b>			
Gross margin	893		15.2
<b>Sub-total</b>	<b>893</b>		
<b>Extra Costs</b>			
Interest on working capital on stock	10		15.3
Forage costs	15		15.3
Interest on working capital re forage	0		15.3
Weed control	52		20.3
<b>Sub- total</b>	<b>77</b>		
<b>Total</b>	<b>970</b>	<b>360</b>	
<b>Income Change</b>	<b>610</b>		

**Level of proposed incentive.**

Proposed points allocation: OE5=400, OE6=500

Percentage of Income Foregone: OE5=66% OE6=82%

**Name of item: OPTION OE8/OE9 Buffering existing in-field ponds in organic grassland and rotational land (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

### **Aims and objectives.**

Ponds with good water quality tend to be of greater value for wildlife than where water quality is low. The creation of unfertilised grass buffers around in-field ponds will help protect them from nutrient leaching and run-off, and provide additional habitat for pond wildlife. The buffer areas may be designed to link two nearby ponds or to link ponds to copses or other boundary features.

### **Management prescriptions to be applied.**

#### ***These options are only available on organic land***

This option must not be located on archaeological sites.

This option is only available where the stocking rate on grassland or grass in rotation is more than 1.0 glu/ha

- Patch size should be no more than 0.5ha, although several patches may be linked where there are several ponds in a field.
- Buffer areas should extend at least 10m from the edge of, and around, each pond.
- You may allow some scrub to develop, but this must be around less than half of the pond margin.
- Cut no more than one year in five to allow the development of tussocky grass and low scrub. Do not allow scrub to develop on archaeological sites.
- Do not apply fertiliser or manure.
- Establish by natural regeneration or by sowing.
- Regular cutting in the first year may be needed to control annual weeds and encourage grass to tiller.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter. If the weed burden becomes unmanageable, you may surface seed these patches with a tussocky grass mix.
- Where the field is grazed, limit livestock access so that less than half of the pond edge is poached.

### **Agronomic assumptions underlying Income Foregone Calculations.**

#### **OE8**

- Stocking rates reduced from, typically, 1.55 glu/ha to 0.44 glu/ha.
- Reduced forage costs.
- Additional weed control costs.

#### **OE9**

- Loss of headland arable gross margin.
- Stocking rates reduced from, typically, 1.55 glu/ha to 0.44 glu/ha.
- Establishment and management of grass margin, cutting at least twice during the first year.
- Some savings in fixed costs.
- Additional weed control costs.

### 1.3.2 *Income Foregone Calculations for Option OE8*

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
Gross margin at 0.44 glu		239	15.3
<b>Sub-total</b>		<b>239</b>	
<b>Costs Saved</b>			
Interest on working capital on stock		34	15.2
Forage costs		83	15.2
Interest on working capital re forage		4	15.2
<b>Sub-total</b>		<b>121</b>	
<b>Income Lost</b>			
Gross margin	893		15.2
<b>Sub-total</b>	<b>893</b>		
<b>Extra Costs</b>			
Interest on working capital on stock	10		15.3
Forage costs	15		15.3
Interest on working capital re forage	0		15.3
Weed control	52		20.3
<b>Sub- total</b>	<b>77</b>		
<b>Total</b>	<b>970</b>	<b>360</b>	
<b>Income Change</b>	<b>610</b>		



### 1.3.2.1.1 Income Foregone Calculations for Option OE9

	Losses	Gains	<i>For details</i>
	£/ha	£/ha	<i>See appendix</i>
<b>Extra Income</b>			
Reduced gross margin on grass for 50% of rotation		120	15.3
<b>Sub-total</b>		<b>120</b>	
<b>Costs Saved</b>			
Interest on working capital		22	16.1
<b>Sub-total</b>		<b>22</b>	
<b>Income Lost</b>			
Loss of gross margin	720		16.1
Interest on working capital	<b>18</b>		
<b>Sub-total</b>	<b>738</b>		
<b>Extra Costs</b>			
Grass establishment	75		13
Topping	14		13
Physical removal of weeds	52		
<b>Sub- total</b>	<b>141</b>		
<b>Total</b>	<b>879</b>	<b>142</b>	
<b>Income Change</b>	<b>737</b>		

#### Level of proposed incentive.

Proposed points allocation: OE8=500, E9=500

Percentage of Income Foregone: 82%, 68%

**Name of item: OPTION OF1 Field corner management (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

1.4

### **Aims and objectives.**

The provision of a natural grassy corner in an arable field, which can contain some grassland flowering plants and scrub, will greatly increase the wildlife interest of the field for invertebrates, birds, reptiles and amphibians (if located near a water feature).

### **Management prescriptions to be applied.**

#### ***This option is available on organic land only***

This option must not be located on archaeological sites.

Although this option is designed for field corners, if you have small areas within the field which would be beneficial to take out of production, you may do so.

- 
- Patch size should be no more than 1 ha and there should be a maximum of one paid patch per 20 ha of arable land to ensure that patches are well distributed across the holding.
- Establish or maintain by natural regeneration or by sowing.
- Regular cutting in the first year may be needed to control annual weeds and encourage grass to tiller.
- Do not apply fertilisers or manures.
- After establishment, cut no more that one year in five to allow the development of tussocky grass and low scrub.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter. If the weed burden becomes unmanageable, you may surface seed these patches with a tussocky grass mix.

If you wish to, you may establish all or part of the margin by sowing a mix of fine-leaved grasses and flowers (e.g. knapweed, birdsfoot trefoil, selfheal, ox-eye daisy, yarrow). If you decide to do this, it is recommended that you cut each year in August or September and, if excess vegetation threatens to suppress the flowers, cut again in March or April. This will maintain the flowers in this sward, or others resulting from natural regeneration. You may remove cuttings, which will further benefit flowers.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- Loss of field edge gross margin which is derived from yields of 90% of that achieved in the rest of the field.
- Additional costs relating to the establishment and management of the grass cover including cutting twice in the first year.

- Additional weed control costs

#### 1.4.1.1.1 Income Foregone Calculations for Option OF1

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
		nil	
<b><i>Sub-total</i></b>		<b><i>nil</i></b>	
<b>Costs Saved</b>			
Interest on working capital		22	16.2
Savings on fixed costs half rotation		36	
<b><i>Sub-total</i></b>		<b>58</b>	
<b>Income Lost</b>			
Loss of gross margin	582		16.2
<b><i>Sub-total</i></b>	<b>582</b>		
<b>Extra Costs</b>			
Topping	8		13
Weed control	52		20.3
<b><i>Sub- total</i></b>	<b>60</b>		
<b>Total</b>	<b>642</b>	<b>58</b>	
<b>Income Change</b>	<b>584</b>		

2

#### Level of proposed incentive.

Proposed points allocation: F1=500

Percentage of Income Foregone: 86%

#### 2.1.1.1.1

2.1.1.1.1.2 Name of item: **OPTION F2 Wild bird seed mixture (non-organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

## 2.2

### **Aims and objectives.**

This type of crop will feed seed-eating birds in arable landscapes, where there is little remaining food source. The aim of this option is to provide a year round continuous supply of food by sowing seed in strips or blocks.

### **Management prescriptions to be applied.**

#### ***This option is available on non-organic land only***

- Sow a combination (or a mix of rows) of at least three seed bearing crops (e.g. cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage), with no single species making up more than 70% by weight of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha. This is to ensure that blocks are well distributed across the holding.
- Re-establish as necessary to maintain seed production, and re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Apply herbicides only to spot treat or weed wipe for the control of injurious weeds, (i.e. creeping or spear thistle, curled or broadleaved dock, or common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed). However, contact, non-residual products may be used prior to spring re-sowing to facilitate re-establishment.
- Seed treatment to control seedling pests and diseases is permitted where essential for successful establishment.
- Do not apply any other pesticides.
- Strips or blocks may periodically be relocated within the same field to avoid the build up of weeds or soil borne disease.
- The area should not be used for access, turning or storage. Do not graze.
- This option may not be located on set-aside land

### **Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss of crop yield and hence crop gross margin.
- Extra costs will be associated with the establishment of the wildlife seed mixture.
- Cost savings will arise from all fixed costs and interest on working capital of not growing an arable crop.
- Additional weed control costs

### 2.2.1.1.1 Income Foregone Calculations for Option F2

	Losses	Gains	For details
	£/ha	£/ha	see appendix
<b>Extra Income</b>		Nil	
<b>Sub-total</b>		<b>2.2.1.1.2 Nil</b>	
<i>2.2.1.1.2.1.1.1.1 Costs Saved</i>			
Savings in fixed costs re arable		71	
Working capital re arable		11	1.1
<b>Sub-total</b>		<b>82</b>	
<b>Income Lost</b>			
Loss of arable gross margin	398		1.1
<b>Sub-total</b>	<b>398</b>		
<b>Extra Costs</b>			
Seed mixture	45		8.1
Seed mixture establishment	65		8.3
Weed control on 10%	5		10
<b>Sub- total</b>	<b>115</b>		
<b>Total</b>	<b>513</b>	<b>82</b>	
<b>Income Change</b>	<b>431</b>		

3

#### Level of proposed incentive.

Proposed points allocation: F2=450

See table below.

**Justification:** Options wild bird seed mixture and pollen and nectar mixture have been grouped according to the table below and a single points allocation used for all options. This is essential for simplicity and flexibility in mixed farming situations (e.g. the field may change from arable to grassland use during the course of an agreement).

<b>Option</b>	<b>IF (£)</b>
F2 Wild bird seed mixture (arable)	431 }
F4 Pollen and nectar seed mixture (arable)	401 } <b>Points allocation for all options in group = 450</b>
J2 Wild bird seed mixture (grassland)	620 }
J3 Pollen and nectar seed mixture (grassland)	591 }
<b>Average IF</b>	<b>511</b>

**3.1.1.1.1 Name of item: OPTION OF2 Wild bird seed mixture (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

**3.2**

**Aims and objectives.**

This type of crop will feed seed-eating birds in arable landscapes, where there is little remaining food source. The aim of this option is to provide a year round continuous supply of food by sowing seed in strips or blocks.

**Management prescriptions to be applied.**

***This option is available on organic land only***

- Sow a combination (or a mix of rows) of at least three seed bearing crops (e.g. cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage), with no single species making up more than 70% by weight of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha. This is to ensure that blocks are well distributed across the holding.
- Re-establish as necessary to maintain seed production, and re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- Strips or blocks may periodically be relocated within the same field to avoid the build up of weeds or soil borne disease.
- The area should not be used for access, turning or storage. Do not graze.
- This option may not be located on set-aside land

**Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss of yield and hence gross margin.
- Extra costs will be associated with the establishment of the wildlife seed mixture.
- Cost savings will arise from all fixed costs and interest on working capital of not growing arable crops or grass.
- Additional weed control costs

## 3.2.1.1.1

## 3.2.1.1.2 Income Foregone Calculations for Option OF2

	Losses	Gains	For details
	£/ha	£/ha	See appendix
<b>Extra Income</b>		Nil	
<b>Sub-total</b>		<b>3.2.1.1.3 Nil</b>	
<i>3.2.1.1.3.1.1.1.1 Costs Saved</i>			
Savings in fixed costs re arable		71	
Working capital re arable		10	12.3
<b>Sub-total</b>		<b>81</b>	
<b>Income Lost</b>			
Loss of arable gross margin	547		12.3
<b>Sub-total</b>	<b>547</b>		
<b>Extra Costs</b>			
Seed mixture	45		18.1
Seed mixture establishment	65		18.3
Weed control (50% of area)	26		20.3
<b>Sub- total</b>	<b>136</b>		
<b>Total</b>	<b>683</b>	<b>82</b>	
<b>Income Change</b>	<b>601</b>		



**Level of proposed incentive.**

Proposed points allocation: OF2=550

Percentage of Income Foregone: 91%

**Name of item: OPTION OF7 Beetle Banks (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

3.3

**Aims and objectives.**

Beetle banks are tussocky grass ridges that run from one side of a field to the other. They provide habitat for ground nesting birds, small mammals and insects; and also contribute to crop pest control by encouraging a variety of insects. When beetle banks are carefully located in sloping fields they can help to avoid soil erosion.

**Management prescriptions to be applied.*****This option is available on organic land only***

- Create an earth ridge at least 2 metres wide and about 0.4 metres high. This can be created during cultivation by careful two directional ploughing. Alternatively, bed forming equipment can be utilised where available.
- You may leave working gaps at each end of not more than 25m.
- Sow with a mixture of perennial grasses, including some tussock forming varieties such as Cocksfoot or Timothy.
- You may need to cut the grass several times during the first summer to aid establishment, thereafter, only cut as necessary to prevent the encroachment of woody and suckering species.
- Do not apply any pesticides, fertilisers or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.

**Agronomic assumptions underlying Income Foregone Calculations.**

- Loss of gross margin based on in field yields.
- Establishment of grass cover.
- Topping 3 times in first year.
- Additional time for machinery operations estimated at 1 hour per ha of strip.
- Additional weed control costs.

### 3.3.1.1.1 Income Foregone Calculations for Option OF7

	Losses	Gains	<i>For details</i>
	£/ha	£/ha	<i>See appendix</i>
<b>Extra Income</b>			
		nil	
<b><i>Sub-total</i></b>		<b><i>nil</i></b>	
<b>Costs Saved</b>			
Interest on working capital on arable		22	16.1
Savings in fixed costs		71	
<b><i>Sub-total</i></b>		<b>93</b>	
<b>Income Lost</b>			
Loss of gross margin	720		16.1
<b><i>Sub-total</i></b>	<b>720</b>		
<b>Extra Costs</b>			
Grass establishment	68		17
Annual topping	19		17
Weed control (on 50% of area)	26		20.3
Additional time for field operations	17		
<b><i>Sub- total</i></b>	<b>130</b>		
<b>Total</b>	<b>850</b>	<b>93</b>	
<b>Income Change</b>	<b>757</b>		

#### Level of proposed incentive.

Proposed points allocation: OF7= 750

Percentage of Income Foregone: 99%

**Name of item: OPTION J2 Wild bird seed mixture in grassland areas (non-organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

3.4

### **Aims and objectives.**

The decline of mixed farming is one of the causes of the falling number of farmland birds in England. This option introduces areas of seed crops and feeds seed-eating birds in grassland landscapes. The aim of this option is to provide a year round continuous supply of food for birds by sowing seed in strips or blocks.

### **Management prescriptions to be applied.**

#### ***This option is available on non-organic land only***

- Sow a mixture (or a mixture of rows) of at least three seed bearing crops (e.g. a cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage) with no single species making up more than 70% of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha, so that blocks are well distributed across the holding.
- To maintain seed production, re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Apply herbicides only to spot treat or weed wipe for the control of injurious grass weeds (i.e. creeping or spear thistle, curled or broadleaved dock, or common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed). However contact, non-residual products may be used prior to spring re-sowing to facilitate re-establishment.
- Seed treatment to control seedling pests and diseases is permitted where essential for successful establishment.
- Do not apply any other pesticides.
- The area should not be used for access, turning or storage. Do not graze.
- Strips or blocks may, periodically, be relocated within the same field where there is a need to avoid the build up of weeds or soil borne disease.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss livestock gross margin.
- Extra costs will be associated with the establishment of the wildlife seed mixture.
- Cost savings will arise from interest on working capital on the livestock.

### 3.4.1.1.1

### 3.4.1.1.2 Income Foregone Calculations for Option J2

	Losses	Gains	<i>For details see appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
nil		nil	
<b>Sub-total</b>		<b>3.4.1.1.3 n il</b>	
<i>3.4.1.1.3.1.1.1.1 Costs Saved</i>			
Working capital re arable		33	4.2
<b>Sub-total</b>		<b>33</b>	
<b>Income Lost</b>			
Loss of livestock gross margin	544		4.2
<b>Sub-total</b>	<b>544</b>		
<b>Extra Costs</b>			
Seed mixture	45		8.1
Seed mixture establishment	64		8.3
<b>Sub- total</b>	<b>109</b>		
<b>Total</b>	<b>653</b>	<b>33</b>	
<b>Income Change</b>	<b>620</b>		

#### Level of proposed incentive.

Proposed points allocation: J2=450

Percentage of Income Foregone: J2=73%

**Name of item: OPTION OJ2 Wild bird seed mixture in grassland areas (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

3.5

### **Aims and objectives.**

The decline of mixed farming is one of the causes of the falling number of farmland birds in England. This option introduces areas of seed crops and feeds seed-eating birds in grassland landscapes. The aim of this option is to provide a year round continuous supply of food for birds by sowing seed in strips or blocks.

### **Management prescriptions to be applied.**

#### ***This option is available on organic land only***

- Sow a mixture (or a mixture of rows) of at least three seed bearing crops (e.g. a cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage) with no single species making up more than 70% of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha, so that blocks are well distributed across the holding.
- To maintain seed production, re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- The area should not be used for access, turning or storage. Do not graze.
- Strips or blocks may, periodically, be relocated within the same field where there is a need to avoid the build up of weeds or soil borne disease.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss livestock gross margin taken as 75% of field as a headland option.
- Extra costs will be associated with the establishment of the wildlife seed mixture and extra weeding.
- Cost savings will arise from interest on working capital on the livestock.

## 3.5.1.1.1

## 3.5.1.1.2 Income Foregone Calculations for Option OJ2

	Losses	Gains	For details
	£/ha	£/ha	See appendix
<b>Extra Income</b>		Nil	
<b>Sub-total</b>		<b>3.5.1.1.3 Nil</b>	
<i>3.5.1.1.3.1.1.1.1 Costs Saved</i>			
Interest on working capital re grassland		26	15.1
<b>Sub-total</b>		<b>26</b>	
<b>Income Lost</b>			
Loss of grass gross margin	677		15.1
<b>Sub-total</b>	<b>677</b>		
<b>Extra Costs</b>			
Seed mixture	45		18.1
Seed mixture establishment	65		18.3
Weed control (50% of area)	26		20.3
<b>Sub- total</b>	<b>136</b>		
<b>Total</b>	<b>813</b>	<b>26</b>	
<b>Income Change</b>	<b>787</b>		

**Level of proposed incentive.**

Proposed points allocation: OJ2=550

Percentage of Income Foregone: 70%

**Name of item: OPTION OK1 Take field corners out of management (organic)**

### 3.6

#### **Aims and objectives.**

This option manages corners of grass field in a way that promotes good soil structure and reduces the likelihood of nutrient run-off into watercourses. Leaving areas of unmanaged land where no fertiliser or manure is applied also increases the biodiversity of the farm.

#### **Management prescriptions to be applied.**

##### ***This option is available on organic land only***

This option must not be located on archaeological sites.

- Take unproductive or awkward corners of improved grass fields out of management. Improved grass is that stocked at more than 1.0 glu/ha .
- Patch size should be no more than 0.5 ha and there should be no more than 3 patches per 10ha, so that the option is well distributed across the holding.
- Do not apply fertiliser or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- In order to allow the development of low scrub and tussocky grass, you should cut no more frequently than once in every five years.
- Do not graze.

#### **Agronomic assumptions underlying Income Foregone Calculations.**

- Elimination of livestock production and loss of gross margin.
- Additional weed control costs.

### 3.6.1.1.1 Income Foregone Calculations for Option OK1

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
		nil	
<b><i>Sub-total</i></b>		<b><i>nil</i></b>	
<b>Costs Saved</b>			
Interest on working capital		26	15.1
<b><i>Sub-total</i></b>		<b>26</b>	
<b>Income Lost</b>			
Loss of gross margin	677		15.1
<b><i>Sub-total</i></b>	<b>677</b>		
<b>Extra Costs</b>			
			13
Weed control	52		20.3
<b><i>Sub- total</i></b>	<b>52</b>		
<b>Total</b>	<b>729</b>	<b>26</b>	
<b>Income Change</b>	<b>703</b>		

#### Level of proposed incentive.

Proposed points allocation: OK1=500

Percentage of Income Foregone: 71%



**Name of item: Option AR3 Enhanced wild bird seed mix plots (rotational or non-rotational)**

**Article within Council Regulation 1257/1999: Article 22**

**Co-financed or state aided item: Co-financed**

***Aims and objectives.***

These areas are managed to provide a sustained source of food during winter months for targeted wild birds. A specified wild bird seed mixture or seed-bearing crop is sown and established in field margin strips and/or blocks within arable fields.

***Management prescriptions to be applied.***

1. Establish the following seed mix ( <b>xxxx</b> ) at <b>xx kg/ha</b> .
2. To maintain seed production, re-sow every <b>year/two years</b>
3. Wild bird seed mix areas should not be used for access, turning or storage. Do not graze.
4. Control undesirable species under guidance provided by your Defra adviser.
5. Treatments applied to adjacent land must not affect or encroach on the wild bird seed mix areas.
6. When the mixture is being re-established, removal of the plant cover and cultivation must not take place before <b>15 March</b> .

**3.6.2 Agronomic assumptions underlying Income Foregone Calculations**

- The enhanced wild bird seed mix plot will be located on the headland The main component of income forgone is the complete loss of crop yield and hence crop gross margin.
- Extra costs will be associated with the establishment of the wildlife seed mixture and weed control on 10% of the area.
- Cost savings will arise from all fixed costs and interest on working capital of not growing an arable crop.
- Additional management for supervision (1 hour) and labour input for maintenance (1½ hours) per hectare

### 3.6.3 Income Forgone Calculation – AR3

	Losses	Gains	<i>For details see appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
<i>Sub-total</i>		<i>Nil</i>	
<b>Costs Saved</b>			
Interest on working capital		12	24
Saving in fixed costs		98	32
<i>Sub-total</i>		<b>110</b>	
<b>Income Lost</b>			
Loss of arable gross margin	398		24
<i>Sub-total</i>	<b>398</b>		
<b>Extra Costs</b>			
Wild bird seed mixture	45		36
Establishment costs	105		36
Weed control	3		35
Management and maintenance	42		
<i>Sub- total</i>	<b>195</b>		
<b>Total</b>	<b>593</b>	<b>110</b>	
<b>Income Change</b>	<b>483</b>		

**Level of proposed incentive.**

Proposed payment rate: £475 per hectare

Percentage of Income Forgone: AR3 = 98%

**Name of item: Option AR7 - Unharvested, fertiliser-free conservation headlands (rotational or non-rotational)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

***Aims and objectives.***

A conservation headland with no fertiliser application is created around the outer edge of the cereal field and left unharvested. This management will provide an open-structured field margin to encourage rare arable plants and arable insects which in turn provide food for the chicks of declining farmland birds. The crop will also provide a winter food source for wild birds and protect sensitive features from inadvertent spray and fertiliser application. This can also help to reduce run-off from the field providing the headland is not compacted and so can help reduce diffuse pollution and flooding.

***Management prescriptions to be applied.***

1. Establish a fertiliser-free, conservation headland along the edge of a cereal crop. The headland width should <b>be/average 6/12/18/24</b> metres .
2. Do not apply any insecticides between <b>15 March</b> and harvest.
3. An agreed herbicide programme in the growing crop must be followed under guidance provided by your Defra adviser.
4. The sown crop in the area under management must not be harvested but left until <b>14 February/ 21 March in the following year</b> before resuming normal rotational management.
5. Treatments applied to adjacent land must not affect or encroach onto the area under management.

**3.6.4 Agronomic assumptions underlying Income Foregone Calculations**

- The main component of income Foregone is the complete loss of crop output from the unharvested conservation headland. There will also be a reduction in the crop gross margin as a result of a switch from winter to spring cropping.
- Savings all fertiliser and fertiliser applications and all spray applications except for weed control for grasses. Need to apply BYDV spray in autumn
- Fixed cost savings will result from spray and fertiliser applications, grain drying and combining costs
- Extra costs to preparing the ground for following crop comparable to set-aside so topping and glyphosate followed by spring crop
- The two figures entered into this budget relate to the production of an unharvested crop and retaining the over-wintered stubble until the following spring. The first element, production of an unfertilised and unharvested conservation headland will result in the complete loss of the crop output from the conservation headland area plus all the associated costs to produce the crop on this area of headland. The second element relates to the retention of the unharvested conservation headland until the following spring ~ 15 February. This forces the

farmer to switch from winter cropping and the loss of its gross margin, to growing a spring crop.

### 3.6.5 Income Foregone Calculation AR7

#### 4 Part 1: Establishment of a fertiliser-free conservation headland

	Losses	Gains	<i>For details</i>
	£/ha	£/ha	<i>see appendix</i>
<b>Extra Income</b>			
Conservation headland		Nil	
<b>Sub-total</b>		<b>Nil</b>	
<b>Costs Saved</b>			
Herbicides & insecticides		16	38
Fixed cost savings		40	32
Fertilisers		86	38
Drying and cleaning charges of not harvesting the crop 7.74t		30	39
<b>Sub-total</b>		<b>172</b>	
<b>Income Lost</b>			
Loss of arable gross margin + variable costs of establishing cereal crop £409/ha+214/ha	623		26
<b>Sub-total</b>	<b>623</b>		
<b>Extra Costs</b>			
Extra costs due to inefficient operations to manage headlands 2hr/ha @ £13/hr	26		
Extra management time 1hr/ha @ £13/hr	13		
<b>Sub- total</b>	<b>39</b>		
<b>Total</b>	662	172	
4.1.1.1.1.1.1.1.1 <i>Income Change</i>	<b>490</b>		

**PART 2: SWITCHING FROM A WINTER CEREAL TO A SPRING CROP**

	Losses	Gains	<i>For details see appendix</i>
	£/ha	£/ha	
<b>4.1.1.1.1.1.2 Extra Income</b>			
Spring crop		371	25
<b>Sub-total</b>		<b>371</b>	
<b>Costs Saved</b>			
Drying and cleaning costs as a result of switch from winter to spring crop 2.04t/ha		8	39
<b>Sub-total</b>		<b>379</b>	
<b>Income Lost</b>			
Loss of arable gross margin	409		
<b>Sub-total</b>	<b>409</b>		
<b>Extra Costs</b>			
Topping	19		34
Glyphosate	10		35
<b>Sub- total</b>	<b>29</b>		
<b>Total</b>	439	379	
4.1.1.1.1.2.1.1 <i>Income Change</i>	<b>59</b>		

Total Income change = 490+59 = 549

**4.1.1.1.1.1.3 Level of proposed incentive**

**4.1.1.1.1.1.4 Proposed payment rate : AR7 = £440 per hectare**

**Percentage of Income Foregone: AR7 = 80%**

**Name of item: Option AR23 - Cultivated fallow plots or margins for arable flora**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

### ***Aims and objectives.***

This option creates margin strips or in-field plots both within or adjacent to arable crops that are left uncropped and undisturbed other than to cultivate providing suitable conditions for the germination and establishment of rare arable plants. These margins will also provide foraging areas in summer for declining farmland birds.

### ***Management prescriptions to be applied.***

1. In <b><i>each agreement year</i></b> , establish <b><i>in field cultivated, fallow areas/ cultivated fallow margins</i></b> by producing a firm, fine tilth, between <b><i>xx/xx and xx/xx</i></b> .
2. Where placed at the field edge, margins should be measured to start <b><i>from the current plough line/from the edge of the field boundary</i></b> . <b><i>Bushy hedges can be allowed to grow out over the margin to a maximum of 1 metre</i></b> .
3. Treatments applied to adjacent land must not affect or encroach on the fallow area.
4. Do not use fallow areas for regular access, turning or storage.
5. Control of undesirable species may be allowed under guidance provided by your Defra adviser.
6. Do not disturb fallow areas until <b><i>31 July</i></b>
7. Except on archaeological features, any areas of soil compaction should be remedied before establishment of these areas

### **4.1.2 Agronomic assumptions underlying Income Foregone Calculations**

- The main component of income Foregone is the loss of crop gross margin. 85% of the plots will be located on headland areas of the field and 15% within the field.
- As a result of not growing an arable crop, interest on working capital and all fixed costs will be made except those incurred in the production of the fallow plots/margins.
- Extra costs will be incurred for annual cultivation and the control of serious blackgrass, wild oat and sterile brome infestations.
- Additional management for supervision (1 hour) and labour input for maintenance (1½ hours) per hectare.
- The two gross margins entered relate to the location of the plots 85% of the plots will be located on headland areas of the field and 15% within the field - as for AR6.



### **Income Foregone Calculation –AR23**

	<b>Losses</b>	<b>Gains</b>	<b>For details see appendix</b>
<b>Extra Income</b>			
<b>Sub-total</b>		<b>Nil</b>	
<b>Costs Saved</b>			
Interesting on working capital		12	23+24
Saving in fixed costs		98	32
<b>Sub-total</b>		<b>110</b>	
<b>Income Lost</b>			
Loss of arable gross margin	338		24
Loss of arable gross margin	70		23
<b>Sub-total</b>	<b>408</b>		
<b>Extra Costs</b>			
Cultivations			
Plough/Press/Disc/Roll	92		36
Weed control on plot	8		35
Extra costs due to inefficient operations to manage 1hr/ha @ £13/hr	<b>13</b>		
Management and maintenance	33		
<b>Sub- total</b>	<b>146</b>		
<b>Total</b>	<b>554</b>	<b>110</b>	
<b>Income Change</b>	<b>444</b>		

#### **4.1.3**

##### **Level of proposed incentive.**

Proposed payment rate: AR23 = £440 per hectare

Percentage of Income Foregone: AR23 = 99%

**Name of item: Option GR6 – Maintenance/Restoration of wet grassland for breeding waders**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

***Aims and objectives.***

This option is designed to maintain wet grassland or restore grassland, which may have been drained and improved for agriculture, back to wet grassland. Through the implementation of suitable soil and water management regimes, conditions suitable for these breeding waders will be maintained or restored. The maintenance and restoration of wet grassland will conserve, restore and strengthen the mosaic of pastoral landscapes. The option can also contribute to protecting archaeology.

***Management prescriptions to be applied.***

1. Ploughing, sub-surface cultivation, reseeding or modifications to the existing drainage (e.g. by pipe, open ditch, sub-soiling or mole ploughing) are not permitted, except as part of a sward enhancement plan agreed with your Defra adviser.
2. Do not top, roll or harrow <b>between 1 October and 30 June</b> ; do not treat <b>more than 30%</b> of the total grassland area in any one year, and always leave a minimum of <b>5%</b> tussocks/longer grass ( <b>except in first two years</b> ).
3. From year 2 onwards, manage the sward by <b>grazing and/or cutting</b> to achieve a sward height of between <b>5cm</b> and <b>15cm</b> in <b>November</b> .
4. <b>Supplementary feeding is confined to the feeding of hay/straw/forage roots/concentrates/mineral blocks in fields xxyy. Feeders and troughs should not be used, feeding sites should be moved regularly and always avoid historic features. Creep feeding of young stock is permitted.</b>
5. <b>Well-rotted farmyard manure may be applied at max rate of 12.5 tonnes /ha/year, but not between 1 April and 30 June (or within 6m of a watercourse). Lime may also be added but not between 1 April and 30 June.</b>
6. Do not work on in-field ditches between <b>1 April</b> and <b>31 August</b> (this does not apply to main ditches currently maintained by the IDB).
7. Do not de-silt any one field ditch more frequently than <b>once every five</b> years (or any one ditch more frequently than <b>once every three years</b> if only one side is de-silted). (De-silting should remove silt only and not cut into the bank profile unless you have agreed otherwise with your Defra adviser. No more than <b>25%</b> of total field ditch area should be de-silted in any one year.)
8. Do not cut the vegetation on any one field ditch more frequently than <b>once every two</b> years (or any one ditch more frequently than <b>once every year</b> if only one side is cut). All cuttings that could damage the sward must be removed.
9. Do not graze between <b>30 November</b> and the <b>28 February</b> , <b>unless you have agreed a stocking and supplementary feeding strategy with your Defra adviser.</b>
10. Control undesirable species such as ( <b>creeping thistle, spear thistle, curled</b>

***dock, broad-leaved dock, common ragwort, common nettle,***) so that by year **2** their cover is less than **5%** of the area.

11. Field operations and stocking must not damage the soil structure or cause heavy poaching, but small areas of bare ground on up to 5% of the field are acceptable. Take particular care when the land is waterlogged.

#### **4.1.4 Agronomic assumptions underlying Income Foregone Calculations**

- Cessation of fertilizer inputs leading to reduced productivity of livestock systems and change in enterprise mix, resulting in loss of gross margin.
- Additional costs of controlling undesirable plant species by spot spraying/weed wiping.
- Increased cost of ditch maintenance.
- Additional cost of grass keep to make up for loss of winter grazing.
- Additional cost of extending winter housing because of restricted spring stocking rate and loss of forage area under standing water.
- Increased labour cost over winter & spring months for maintaining water levels.
- Additional management input required for monitoring and assessing outcomes.
- Additional cost of topping to manage rush and scrub.
- Increased cost of animal health treatment as a result of wet grazing conditions.

#### 4.1.5 Income Foregone Calculation – GR6

	Losses	Gains	<i>For details see appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
Livestock gross margin		268	50.3
<b>Sub-total</b>		<b>268</b>	
<b>Costs Saved</b>			
Forage costs		77	50.2
Working capital re forage		3	50.2
Working capital re livestock		50	50.1
<b>Sub-total</b>		<b>130</b>	
<b>Income Lost</b>			
Livestock gross margin	482		50.1
<b>Sub-total</b>	<b>482</b>		
<b>Extra Costs</b>			
Forage costs	16		50.4
Working capital re forage	1		50.4
Working capital re Livestock	35		50.3
Extra operating costs	198		50.5
<b>Sub- total</b>	<b>250</b>		
<b>Total</b>	<b>732</b>	<b>398</b>	
<b>Income Change</b>	<b>334</b>		

#### 4.1.6

##### Level of proposed incentive.

4.1.7 Proposed payment rate: GR6 = £335 per hectare

Percentage of Income Foregone: GR6 = 100%

**Name of item: Option IT1 - Creation of inter-tidal and saline habitats on arable land**

**Article within Council Regulation 1698/2005: Article 39**

### **Aims and objectives.**

This option creates coastal intertidal and saline habitats, including transitional areas, on former arable land, by a managed breach in the sea defences. These habitats include coastal saltmarsh, mudflats and saline lagoons, and they support many plants and animals adapted to the range of salinity and differences in tidal inundation and influence. This option aims can contribute to more sustainable flood management, enhance the coastal landscape and protect important archaeological sites.

### **Management prescriptions to be applied.**

1. Do not undertake any excavation or construction other than that agreed in the plan without prior consent from your Defra adviser.
2. Do not reinstate the original sea defence alignment or undertake any works on the original sea defences, unless for safety or environmental reasons to stabilise the breach, and then only with consent from your Defra adviser.
3. Maintain the drainage and water flow regime agreed in the management plan and do not alter without prior written consent from your Defra adviser.
4. Do not remove accumulations of seaweed without prior written approval from your Defra adviser.
5. Do not remove wood debris on the tide line.
6. Remove litter by hand.
7. Do not undertake or permit vehicular access, except where essential for the purposes of land management.
8. Do not introduce grazing on intertidal, saline or transitional areas, unless agreed with your Defra adviser as part of a management plan.
9. There must be no application of nutrients as fertilisers, organic manures or waste materials (including sewage sludge).
10. There must be no ploughing or other cultivation, reseeded, rolling or chain harrowing.

#### **4.1.8 Agronomic assumptions underlying Income Foregone Calculations**

- Loss of arable system gross margin
- Savings in arable fixed costs & working capital
- Additional costs for weed control, ungrazed vegetation management, repair & maintenance of boundary fencing, removal of debris, reinstatement and management of infrastructure, maintenance of drainage system & access/conservation management
- Additional HLS management time
- Loss of Single Farm Payment

#### 4.1.9 Income Foregone Calculation – IT1

	Losses	Gains	<i>For details see appendix</i>
	£/Ha	£/Ha	
<b>Extra Income</b>			
nil		Nil	
<b>Sub-total</b>		<b>nil</b>	
<b>Costs Saved</b>			
Working capital re arable		12	65
Fixed Costs re arable		71	65
<b>Sub-total</b>		<b>83</b>	
<b>Income Lost</b>			
Arable gross margin	461		65
Single Farm Payment	240		
<b>Sub-total</b>	<b>701</b>		
<b>Extra Costs</b>			
Weed/vegetation control	27		65
Fencing/boundary repair/maintenance	6		
Removal of debris	21		65
Maintenance of infrastructure	31		65
Maintenance of drainage system	23		65
Access/Conservation management	54		65
Management time	40		65
<b>Sub- total</b>	<b>192</b>		
<b>Total</b>	<b>893</b>	<b>83</b>	
<b>Income Change</b>	<b>810</b>		

**Level of proposed incentive.**

Proposed payment rate: IT1 = £700 per hectare

Percentage of Income Foregone: IT1 = 86%





**Name of item: OPTION OF7 Beetle Banks (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

4.2

### **Aims and objectives.**

Beetle banks are tussocky grass ridges that run from one side of a field to the other. They provide habitat for ground nesting birds, small mammals and insects; and also contribute to crop pest control by encouraging a variety of insects. When beetle banks are carefully located in sloping fields they can help to avoid soil erosion.

### **Management prescriptions to be applied.**

#### ***This option is available on organic land only***

- Create an earth ridge at least 2 metres wide and about 0.4 metres high. This can be created during cultivation by careful two directional ploughing. Alternatively, bed forming equipment can be utilised where available.
- You may leave working gaps at each end of not more than 25m.
- Sow with a mixture of perennial grasses, including some tussock forming varieties such as Cocksfoot or Timothy.
- You may need to cut the grass several times during the first summer to aid establishment, thereafter, only cut as necessary to prevent the encroachment of woody and suckering species.
- Do not apply any pesticides, fertilisers or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- Loss of gross margin based on in field yields.
- Establishment of grass cover.
- Topping 3 times in first year.
- Additional time for machinery operations estimated at 1 hour per ha of strip.
- Additional weed control costs.

#### 4.2.1.1.1 Income Foregone Calculations for Option OF7

	Losses	Gains	<i>For details</i>
	£/ha	£/ha	<i>See appendix</i>
<b>Extra Income</b>			
		nil	
<b><i>Sub-total</i></b>		<b><i>nil</i></b>	
<b>Costs Saved</b>			
Interest on working capital on arable		22	16.1
Savings in fixed costs		71	
<b><i>Sub-total</i></b>		<b>93</b>	
<b>Income Lost</b>			
Loss of gross margin	720		16.1
<b><i>Sub-total</i></b>	<b>720</b>		
<b>Extra Costs</b>			
Grass establishment	68		17
Annual topping	19		17
Weed control (on 50% of area)	26		20.3
Additional time for field operations	17		
<b><i>Sub- total</i></b>	<b>130</b>		
<b>Total</b>	<b>850</b>	<b>93</b>	
<b>Income Change</b>	<b>757</b>		

#### Level of proposed incentive.

Proposed points allocation: OF7= 750

Percentage of Income Foregone: 99%

**Name of item: OPTION J2 Wild bird seed mixture in grassland areas (non-organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

4.3

#### **Aims and objectives.**

The decline of mixed farming is one of the causes of the falling number of farmland birds in England. This option introduces areas of seed crops and feeds seed-eating birds in grassland landscapes. The aim of this option is to provide a year round continuous supply of food for birds by sowing seed in strips or blocks.

#### **Management prescriptions to be applied.**

##### ***This option is available on non-organic land only***

- Sow a mixture (or a mixture of rows) of at least three seed bearing crops (e.g. a cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage) with no single species making up more than 70% of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha, so that blocks are well distributed across the holding.
- To maintain seed production, re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Apply herbicides only to spot treat or weed wipe for the control of injurious grass weeds (i.e. creeping or spear thistle, curled or broadleaved dock, or common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed). However contact, non-residual products may be used prior to spring re-sowing to facilitate re-establishment.
- Seed treatment to control seedling pests and diseases is permitted where essential for successful establishment.
- Do not apply any other pesticides.
- The area should not be used for access, turning or storage. Do not graze.
- Strips or blocks may, periodically, be relocated within the same field where there is a need to avoid the build up of weeds or soil borne disease.

#### **Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss livestock gross margin.
- Extra costs will be associated with the establishment of the wildlife seed mixture.
- Cost savings will arise from interest on working capital on the livestock.

4.3.1.1.1

4.3.1.1.2 Income Foregone Calculations for Option J2

	Losses	Gains	<i>For details</i>
	£/ha	£/ha	<i>see appendix</i>
<b>Extra Income</b>			
nil		nil	
<b>Sub-total</b>		<b>4.3.1.1.3 n il</b>	
<b>4.3.1.1.3.1.1.1.1 Costs Saved</b>			
Working capital re arable		33	4.2
<b>Sub-total</b>		<b>33</b>	
<b>Income Lost</b>			
Loss of livestock gross margin	544		4.2
<b>Sub-total</b>	<b>544</b>		
<b>Extra Costs</b>			
Seed mixture	45		8.1
Seed mixture establishment	64		8.3
<b>Sub- total</b>	<b>109</b>		
<b>Total</b>	<b>653</b>	<b>33</b>	
<b>Income Change</b>	<b>620</b>		

**Level of proposed incentive.**

Proposed points allocation: J2=450

Percentage of Income Foregone: J2=73%

**Name of item: OPTION OJ2 Wild bird seed mixture in grassland areas (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

4.4

#### **Aims and objectives.**

The decline of mixed farming is one of the causes of the falling number of farmland birds in England. This option introduces areas of seed crops and feeds seed-eating birds in grassland landscapes. The aim of this option is to provide a year round continuous supply of food for birds by sowing seed in strips or blocks.

#### **Management prescriptions to be applied.**

##### ***This option is available on organic land only***

- Sow a mixture (or a mixture of rows) of at least three seed bearing crops (e.g. a cereal, kale, quinoa, linseed, millet, mustard, fodder radish, borage) with no single species making up more than 70% of the mix.
- Sow in strips at least 6 metres wide at the edges of fields and/or in blocks. Blocks should not exceed 0.5 hectares and you should have no more than one block per 20 ha, so that blocks are well distributed across the holding.
- To maintain seed production, re-sow at least every other year.
- Only apply fertiliser or manure if necessary for establishment.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- The area should not be used for access, turning or storage. Do not graze.
- Strips or blocks may, periodically, be relocated within the same field where there is a need to avoid the build up of weeds or soil borne disease.

#### **Agronomic assumptions underlying Income Foregone Calculations.**

- The main component of income Foregone is the complete loss livestock gross margin taken as 75% of field as a headland option.
- Extra costs will be associated with the establishment of the wildlife seed mixture and extra weeding.
- Cost savings will arise from interest on working capital on the livestock.

## 4.4.1.1.1

## 4.4.1.1.2 Income Foregone Calculations for Option OJ2

	Losses	Gains	For details
	£/ha	£/ha	See appendix
<b>Extra Income</b>		Nil	
<b>Sub-total</b>		<b>4.4.1.1.3 Nil</b>	
<i>4.4.1.1.3.1.1.1.1 Costs Saved</i>			
Interest on working capital re grassland		26	15.1
<b>Sub-total</b>		<b>26</b>	
<b>Income Lost</b>			
Loss of grass gross margin	677		15.1
<b>Sub-total</b>	<b>677</b>		
<b>Extra Costs</b>			
Seed mixture	45		18.1
Seed mixture establishment	65		18.3
Weed control (50% of area)	26		20.3
<b>Sub- total</b>	<b>136</b>		
<b>Total</b>	<b>813</b>	<b>26</b>	
<b>Income Change</b>	<b>787</b>		

**Level of proposed incentive.**

Proposed points allocation: OJ2=550

Percentage of Income Foregone: 70%

**Name of item: OPTION OK1 Take field corners out of management (organic)**

**Article within Council Regulation 1698/2005: Article 39**

**Co-financed or state aided item: Co-financed**

4.5

### **Aims and objectives.**

This option manages corners of grass field in a way that promotes good soil structure and reduces the likelihood of nutrient run-off into watercourses. Leaving areas of unmanaged land where no fertiliser or manure is applied also increases the biodiversity of the farm.

### **Management prescriptions to be applied.**

#### ***This option is available on organic land only***

This option must not be located on archaeological sites.

- Take unproductive or awkward corners of improved grass fields out of management. Improved grass is that stocked at more than 1.0 glu/ha .
- Patch size should be no more than 0.5 ha and there should be no more than 3 patches per 10ha, so that the option is well distributed across the holding.
- Do not apply fertiliser or manure.
- Injurious weeds (e.g. creeping, spear or field thistle, curled or broad-leaved dock, and common ragwort), or invasive alien species (e.g. Himalayan balsam, rhododendron or Japanese knotweed) may be controlled by cultivation before establishment, cutting in the first year and selective trimming or manual removal thereafter.
- In order to allow the development of low scrub and tussocky grass, you should cut no more frequently than once in every five years.
- Do not graze.

### **Agronomic assumptions underlying Income Foregone Calculations.**

- Elimination of livestock production and loss of gross margin.
- Additional weed control costs.



#### 4.5.1.1.1 Income Foregone Calculations for Option OK1

	Losses	Gains	<i>For details See appendix</i>
	£/ha	£/ha	
<b>Extra Income</b>			
		nil	
<b><i>Sub-total</i></b>		<b><i>nil</i></b>	
<b>Costs Saved</b>			
Interest on working capital		26	15.1
<b><i>Sub-total</i></b>		<b>26</b>	
<b>Income Lost</b>			
Loss of gross margin	677		15.1
<b><i>Sub-total</i></b>	<b>677</b>		
<b>Extra Costs</b>			
			13
Weed control	52		20.3
<b><i>Sub- total</i></b>	<b>52</b>		
<b>Total</b>	<b>729</b>	<b>26</b>	
<b>Income Change</b>	<b>703</b>		

#### Level of proposed incentive.

Proposed points allocation: OK1=500

Percentage of Income Foregone: 71%





