Basic Payments SchemeGreening 2016



Agriculture, Food and Rural Communities Directorate

March 2016

Introduction and updates for 2016 Page 1 of 2

Introduction and updates for 2016

Date published: 12 March, 2016

To see recent changes to this guidance, check the bottom of the page.

This guidance provides details on the three Greening elements of the Common Agricultural Policy and should be read in conjunction with the guidance for the Basic Payment Scheme and Cross Compliance.

- Basic Payment Scheme
- Cross Compliance

Please ensure that you read all the relevant elements of this updated 2016 guidance (including the annexes) if you are intending to apply under the Basic Payment Scheme. There have been a number of changes to the Greening requirements compared to 2015 that fall into two categories:

Scheme and other changes for 2016

- when calculating the arable area subject to Greening for 2016 only the land claimed for Basic Payment Scheme on your Single Application Form will be considered
- if you have EFA features, you are required to submit a map detailing the location and size of each EFA feature with your 2016 SAF, see Annex J
- changes to the rules on EFA Nitrogen fixing crops including changes to the associated EFA field margin requirements. See Types of EFA
- EFA Field margins and EFA Buffer strips no longer have to be adjacent to arable land but within five metres of arable land
- changes to the list of acceptable crops in the EFA Green Cover mix to include Clover and Radish.
 See Types of EFA
- crop codes (found in annexes D to I) have been updated to be in line with your 2016 Single Application Form
- confirmation that organic land in conversion may be exempt from Greening, EFA and crop diversification

Changes specific to permanent grassland

- an additional compulsory requirement is the inclusion of a nitrogen fertiliser and lime plan for permanent grassland
- the detailed requirements for permanent grassland can be found in the permanent grassland of this guide

The Crop Diversification equivalence option detailed in the 2016 Greening guidance that was published in October 2015 will not be introduced in 2016. Therefore Annex K has now been deleted.

In this guidance:

- Greening overview
- Permanent grassland
- Crop diversification
- Ecological Focus Areas
- Case studies
- Glossary and abbreviations
- Annexes

Recent changes

Section	Change	Previous text	New text
Scheme and other changes for 2016	Some additional information	Changes to the rules on Ecological Focus Areas (EFA) nitrogen fixing crops, including changes to the associated EFA field margin requirements. See Ecological Focus Areas. EFA field margins and EFA buffer strips no longer have to be adjacent to arable land	When calculating the arable area subject to Greening for 2016 only the land claimed for Basic Payment Scheme on your Single Application Form will be considered. If you have EFA features, you are required to submit a map detailing the location and size of each

Rural Payments and Services - © Crown copyright

Introduction and updates for 2016 Page 2 of 2

		but within five metres of arable land. If you have EFA features, you are required to submit a map detailing the location and size of each EFA feature with your 2016 Single Application Form. See Annex J	EFA feature with your 2016 SAF, see Annex J. Changes to the rules on EFA Nitrogen fixing crops including changes to the associated EFA field margin requirements. Please see Types of EFA. EFA Field margins and EFA Buffer strips no longer have to be adjacent to arable land but within 5 m of arable land. Changes to the list of acceptable crops in the EFA Green Cover mix to include Clover and Radish. Please see Types of EFA
		N/A	crop codes (found in annexes D to I) have been updated to be in line with your 2016 Single Application Form
		N/A	Confirmation that organic land in conversion may be exempt from Greening, EFA and crop diversification
The Greening Equivalence Scheme	Alterations to the text	The Scottish Government has applied to the European Commission for approval to implement a Greening Equivalence Scheme in Scotland from 2016. If approved (and subject to any amendments made by the Commission) it is proposed that the scheme will contain all the existing requirements, with the exception of two specific additional elements: a voluntary alternative Crop Diversification requirementan additional compulsory requirement for the inclusion of a Nutrient plan for permanent grassland Details of the Scottish Government Equivalence scheme proposals can be found in Annex K. This guidance will be updated if the Equivalence scheme is approved and the Scottish Government confirms its intention to implement the scheme in 2016.	Changes specific to permanent grassland: an additional compulsory requirement is the inclusion of a nutrient plan for permanent grassland the detailed requirements for permanent grassland can be found in the permanent grassland of this guide The Crop Diversification equivalence option detailed in the 2016 Greening guidance that was published in October 2015 will not be introduced in 2016. Therefore Annex K has now been deleted.

Previous versions

Previous versions of this page

Overview Page 1 of 2

Overview

Date published: 15 October, 2015

Table of Contents

What does Greening mean to me?

What do I need to read?

Is Greening the same as Good Agricultural and Environmental Condition?

Download guidance

Greening was introduced to improve the environmental performance of farming. A new Greening payment 'for agricultural practices beneficial for the climate and environment' will be paid on top of the Basic Payment Scheme from 2015.

Thirty per cent of Scotland's Direct Payment budget is allocated to the Greening payment. When considering the implementation of the Greening requirements in Scotland, a balance was reached regarding the transfer of funds from Pillar one to Pillar two and the activities to be undertaken to meet the Greening requirements.

Under reform of the Common Agricultural Policy, it is mandatory for applicants to the Basic Payment Scheme to comply with Greening requirements, where relevant on their land. In return for this, an additional Greening payment will be made. The Greening requirements cover:

- · permanent grassland
- crop diversification
- Ecological Focus Areas (EFAs)

The Greening requirement applies at a business level. This is the land under one Business Reference Number (BRN) – all the land your business claimed on your Single Application Form. Greening is paid in accordance with the number of eligible hectares in the region concerned in each year of application.

You may be subject to inspections throughout the year to ensure you are adopting relevant Greening practices. If you fail to meet your Greening requirements, this will result in a proportionate reduction being applied to your Greening payment. From 2017, in addition to this reduction, you may incur an administrative penalty which can be applied to your Basic Payment.

What does Greening mean to me?

To make sure you receive the Greening payment with your basic payment, you must comply with Greening requirements. Many businesses already comply with Greening requirements as part of their normal agricultural practices.

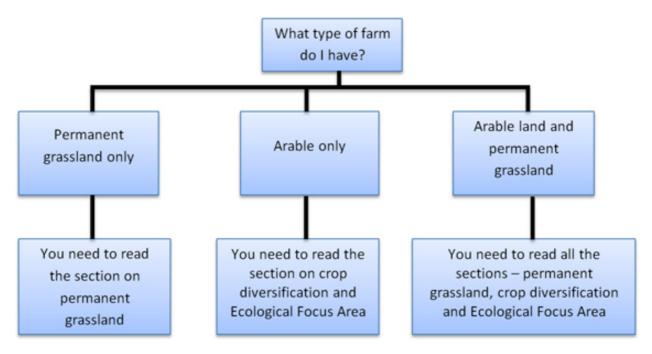
However, it is important you read this booklet to see which Greening requirements apply to you. Greening activities will include one or more of the following:

- protecting permanent grassland designated as environmentally sensitive grassland
- growing a minimum number of crops
- farming five per cent of your arable area in a manner that promotes biodiversity known as an Ecological Focus Area (EFA)

What do I need to read?

This guidance will describe the three Greening elements and what you need to do for each of the requirements. Use our flowchart below to find out which parts of this guidance are important for you to read.

Overview Page 2 of 2



When considering this flowchart, for detailed definitions of arable and permanent grass, please see the glossary.

<u>Is Greening the same as Good Agricultural and Environmental</u> Condition?

No, but a lot of the GAEC and Greening practices complement each other. As with Greening, you are also required to comply with GAEC, under Cross Compliance to meet Basic Payment Scheme requirements.

You should be aware of the following examples of GAEC:

- a requirement to keep a two metre buffer strip from the centre line of a hedge and a two metre buffer strip from the top of the bank of surface water
- a ban on the cutting or trimming of hedges between 1 March and 31 August
- GAEC 1 you must not apply pesticides within two metres of the top of the bank of surface water unless the following exemption applies:
- spot applications of pesticides to control injurious weeds, invasive species and, after prior written consent of the Scottish Ministers and / or other statutory bodies, certain other weed species. If you are carrying out this exemption, please be aware of SEPA's requirements for applying pesticides in or near water. Information on this can be found on the Application of Herbicide in or Near Water page of the SEARS website
 - GAEC 7 you must not apply fertilisers or pesticides within two metres of the centre line of a hedge unless one of the following exemptions apply:
- applications of fertilisers or pesticides to establish a new hedge. This applies from the time the land is prepared for planting the new hedge to the end of the hedge's third growing season
- spot application of pesticides to control injurious weeds, invasive species and, after prior written consent of the Scottish Ministers and / or other statutory bodies, certain other weed species

This list is not exhaustive, the full guidance covering GAEC is available on the Cross Compliance pages of Rural Payments and Services.

Download guidance

Click 'Download this page' to create a printable version of this guidance you can save or print out.

Permanent grassland Page 1 of 4

Permanent grassland

Date published: 18 February, 2016

For recent changes to this guidance, please see the bottom of the page.

Table of Contents

What is permanent grassland

What permanent grassland requirements apply to me?

What is temporary grassland?

Recent changes

Previous versions

Download guidance

What is permanent grassland

Permanent grassland is land used to grow grasses or other herbaceous forage (see Annex H), either naturally (self-seeded including 'rough grazing') or through cultivation (sown), and which is more than five years old.

All unimproved semi-natural areas are already protected by:

The Environmental Impact Assessment (Agriculture) (Scotland) Regulations 2006

These grasslands cannot be improved without first determining whether an Environmental Impact Assessment (EIA) is required.

All farmers, including those farming organic land, are required to comply with Environmental Impact Assessment and Cross Compliance rules regarding ploughing of permanent grassland. If you have land in Sites of Special Scientific Interest (SSSIs), you must also observe site requirements that may apply to grassland habitats on the site.

If you want more information about this you should contact your local area office.







Pictures above: examples of permanent grassland

Greening requirements for permanent grassland

Scotland's requirement for Greening:

From 2015 onwards, the regulations require that the ratio of permanent grassland compared to the total agricultural area claimed must not decrease by more than five per cent. The maintenance of this ratio will be monitored at a national level and it is only if there is a reduction in the ratio the Scottish Government will take action to increase the area of permanent grassland.

Your additional business requirement for Greening

Permanent Grassland – nitrogen fertiliser and lime plan

Permanent grassland Page 2 of 4

As part of the Scottish Government's contribution to the mitigation of climate change, and to improve the efficiency of Scottish agricultural businesses, farmers will be required to maintain a record of their intentions regarding the application of inorganic nitrogen fertiliser and lime.

All claimants for the Basic Payment Scheme wishing to receive a Greening payment must complete an annual nitrogen fertiliser and lime plan for fields of permanent grassland.

An example template of a permanent grassland nitrogen fertiliser and lime plan can be found in Annex C.

Requirements for the Permanent Grassland nitrogen fertiliser and lime plan

You must:

- include any parcel in the plan that you claim for Basic Payment Scheme which comprises areas of permanent grassland or open grazed woodland, provided that the parcel does not contain areas of arable and/or rough grazing
- record and specify in the plan whether and to what extent it is anticipated that inorganic nitrogen fertiliser or lime is to be applied to each parcel
- complete the nitrogen fertiliser and lime plan annually by the 9 June each year
- retain your plan and make it available on request to any inspector as part of the land inspection or validation of your Single Application Form

Further guidance on the use of nitrogen fertiliser and the links to the application of lime to change the pH status of soil and improve the uptake of inorganic fertiliser can be found in Annex C.

In addition, individual businesses must not convert or plough permanent grassland designated as Environmentally Sensitive Grassland (ESG) on their holding.

In Scotland, Environmentally Sensitive Grasslands have been defined as NATURA designated sites where land managers will already be bound by the existing specific management agreements in place to ensure they are protected and managed sympathetically.

You can check the ESG on your holding using 'View only maps' when you log in to Rural Payments and Services.





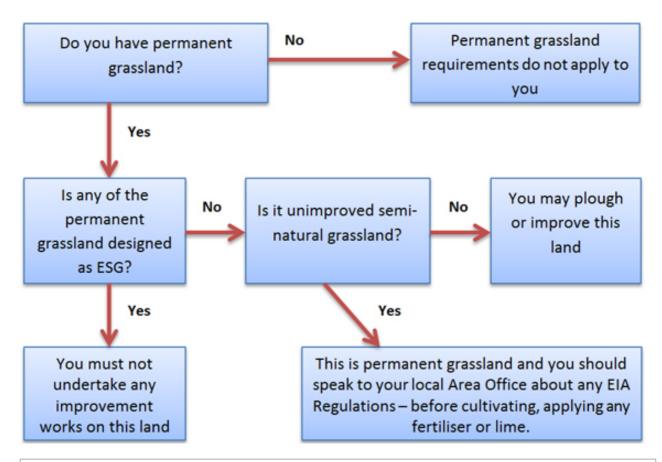


Pictures above: examples of environmentally sensitive grassland

What permanent grassland requirements apply to me?

Use our flowchart below to see what applies to you.

Permanent grassland Page 3 of 4



All claimants for the Basic Payment Scheme wishing to receive a Greening payment must complete (and retain) an annual nitrogen fertiliser and lime plan for fields of permanent grassland or open grazed woodland. Please see above for more details.

Helpful tips for Permanent Grassland

- permanent grassland is grassland more than five years old
- if your permanent grassland is designated (e.g. SSSI, SAC, SPA) in any way you should always consult Scottish Natural Heritage before carrying out any works
- if you cultivate permanent grassland to establish any other crop apart from grass, the land will convert to arable and future grass will be temporary (for at least five years)
- if you cultivate permanent grass and immediately sow a new grass ley, the land will retain its status as permanent grass
- if you use some of your permanent grassland area as EFA, i.e. a buffer strip or field margin, this means that this area of EFA on your permanent grassland is now classed as arable land. You will claim it as Permanent Cover (PC) on your Single Application Form and it will be added to your Greening total arable area calculation. An example would be:

Total area of holding = 125 ha

Total arable area = 100 ha

EFA is 5% = 5 ha

If all the five hectares of EFA is sited on permanent grassland this would now become arable and would be added to give your new total arable area, for the purpose of Greening.

Therefore: (original total arable area) 100 ha + 5 ha (EFA) = 105 ha (new total arable area). New area of EFA required is now 5.25 ha.

What is temporary grassland?

Temporary grassland is land that has been in grass or other herbaceous forage for five years or less.

How to claim your new grassland

There are four traditional ways of establishing a temporary grassland sward:

- example one: spring sown (prior to 15 May). This is the main crop for that year and will be claimed as temporary grass, for example 'TGRS1' on the Single Application Form
- example two: undersown grass where the main cereal nurse crop, for example 'SB' will be claimed on the Single Application Form
- example three: autumn sown grass where the previous arable crop, for example 'SO' will be claimed on the Single Application Form

Permanent grassland Page 4 of 4

 example four: permanent grassland cultivated post 15 May and sown out to a brassica crop and then sown to grass the following Spring

If the land remains in grass for a number of years following establishment, it should be entered on the Single Application Form as follows:

	SAF	SAF	SAF	SAF	SAF	SAF	SAF
Example one	TGRS1	TGRS2	TGRS3	TGRS4	TGRS5	PGRS	PGRS
Example two	SB	TGRS1	TGRS2	TGRS3	TGRS4	TGRS5	PGRS
Example three	so	TGRS1	TGRS2	TGRS3	TGRS4	TGRS5	PGRS
Example four	PGRS	TGRS1	TGRS2	TGRS3	TGRS4	TGRS5	PGRS

Your arable land includes any temporary grassland in your crop rotation. Temporary grassland is grass that is five years old or less.

Recent changes

Section	Change	Previous text	New text
Your additional business requirement for Greening	Addition of information on a nitrogen fertiliser and lime plan	New text	As above, section starts : As part of the Scottish Government's contribution to the mitigation of climate change, and to improve the efficiency of Scottish agricultural businesses, farmers will be required to maintain a record of their intentions regarding the application of inorganic nitrogen fertiliser and lime.

Previous versions

Previous versions of this page

Download guidance

Click 'Download this page' to create a printable version of this guidance you can save or print out.

Crop diversification Page 1 of 4

Crop diversification

Date published: 12 March, 2016

To see recent changes to this guidance, please check the bottom of this page

Table of Contents

What is crop diversification?

I'm organic - am I exempt?

Do the crop diversification requirements apply to me?

What land is included in the calculation and then subject to crop diversification?

Crop diversification requirements

Other exeptions or exemptions

Can I grow more than two or three crops?

Eligible crops for crop diversification

Recent changes

Previous versions

Download guidance

What is crop diversification?

Crop diversification is the growing of a number of different crops. It enhances biodiversity and may improve soil organic matter by:

- reducing soil erosion, pest and weed control
- improving water quality
- · reducing the effects of climate change

I'm organic - am I exempt?

If all of your holding (all of the land claimed on your Single Application Form) is certified as organic or in organic conversion, the crop diversification requirements do not apply to you.

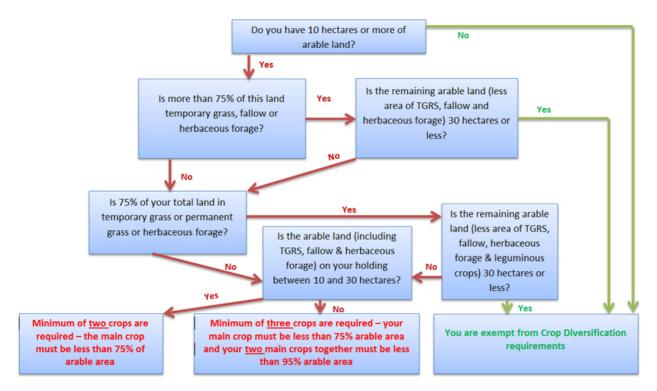
If part of your holding is certified as organic or in organic conversion, the claimed areas that are not certified as organic or in organic conversion need to be considered for crop diversification.

If your holding is only partly organic, you may choose not to benefit from the exemption for organic land. Instead you may choose to meet Greening requirements across all your arable land. In this case the organic crops would count towards the crop diversification requirement

Do the crop diversification requirements apply to me?

The areas of land are those claimed for Basic Payment Scheme. (Please also see below).

Crop diversification Page 2 of 4



What land is included in the calculation and then subject to crop diversification?

For the purposes of calculating your crop diversification requirement, your arable land must include all of the land used to grow arable crops, fallow, temporary grassland, leguminous crops and herbaceous crops that you claim for the Basic Payment Scheme.

If you use some of your permanent grassland area as Ecological Focus Areas (for example, a buffer strip or field margin), this means that this area of EFA on your permanent grassland is now classed as arable land. You will claim it as permanent cover on your Single Application Form and it will be added to your total arable area calculation. An example would be:

Total area of holding = 125 ha Total arable area = 100 ha EFA is 5% = 5 ha

If all the five hectares of EFA is sited on permanent grassland this would now become arable and would be added to give your new total arable area, for the purpose of Greening.

Therefore: (original total arable area) 100 ha + 5 ha (EFA) = 105 ha (new total arable area).

When calculating your arable area you should ensure that you include any land that is fallow, any land in an EFA buffer or EFA field margin (see Ecological Focus Areas) and any land that is currently in an agri-environment scheme that does not allow production, which was formerly arable. For example: beetle banks, grass margins and water margins where grazing is excluded.

Permanent crops are not included in the calculation of your arable area (see the Glossary for a definition of permanent crops).

Crop diversification requirements

Unless exempt, you will be required to have a minimum of two or three crops as detailed in the flow chart above.

Other exeptions or exemptions

1. In addition to the exemptions in the flow chart above there are a small number of businesses that an additional refinement to the crop diversification rules apply to. If you comply with the following regulation you will be exempt:

Crop diversification Page 3 of 4

 where the temporary grassland, herbaceous forage or fallow land covers more than 75 per cent of the arable land on your holding and you don't meet any of the exemptions in the flow chart above because the rest of the arable land on your holding is more than 30 hectares

You must grow at least two other crops on the remaining arable land. The main crop on this remaining arable land must not cover more than 75 per cent of this area, unless this main crop on the remaining arable area is grass, herbaceous forage, or fallow. In this case, you don't need to reduce the percentage covered by this main crop.

2. If you have taken control of new land that is more than 50 per cent of what you claimed in the previous year, and provided that this land is being cultivated differently to that of the previous year, you may be exempt. You should contact your local area office to clarify your crop diversification requirements.

Can I grow more than two or three crops?

You can grow as many crops as you like, but if you are not exempt and have between 10 and 30 hectares of arable land you must have at least two crop types with no one crop occupying more than 75 per cent of the arable land.

If you have more than 30 hectares of arable land and are not exempt, then you must have at least three crops with the main crop not occupying more than 75 per cent of the arable land and no two crops occupying more than 95 per cent of the arable land area. Any additional crops must therefore occupy at least five per cent of the arable land area.

These limits are maximum percentages that you must not exceed but you can grow smaller amounts and/ or more crops if you wish. For example, if you had 100 hectares of arable land you could grow:

- 40 hectares of spring barley
- 30 hectares of winter wheat
- 20 hectares of temporary grass
- and leave 10 hectares as fallow

Fallow can also count towards your EFA requirement. See Ecological Focus Areas.

Eligible crops for crop diversification

For the purposes of crop diversification, a crop is defined in the regulations as any of the following:

- (a) a culture of any of the different genera defined in the botanical classification of crops
- (b) a culture of any of the species in the case of Brassicaceae, Solanaceae and Cucurbitaceae
- (c) land lying fallow
- (d) grass or other herbaceous forage (clovers, lucerne, sainfoin and Forage vetches) on arable land (temporary grass).

Winter and spring crops count as separate crops.

Most crops grown in Scotland meet the definition of a crop outlined in the regulations. The exceptions to this are permanent grassland and permanent crops which do not count as crops for the purposes of crop diversification.

Permanent crops are non-rotational crops other than permanent grassland that occupy the land for five years or more and yield repeated harvests. The table in Annex D provides examples of crops which meet the definitions of (a) and (b) above. It should be noted that these are not exhaustive.

If the crop that you are intending to grow is not on the list or you have any queries as to what would be regarded as a separate crop for the purposes of crop diversification, please contact your local area office.

It's important to note that individual crops which fall within a single genus or single species (in the case of Brassicaceae, Solanaceae and Cucurbitaceae) count as only one crop for the purposes of crop diversification. We have grouped crops of like genus or single species into a 'crop family'. If you grow only onions and leeks, these would count as only one crop because they fall within the same genera (Allium) as we have identified these as the 'onion family'.

The end use of the crop has no impact on how it is counted for the purposes of crop diversification. For example, if you grow some winter wheat as wholecrop and some for grain, this counts as one crop (winter

Crop diversification Page 4 of 4

wheat). Potatoes will be considered to be a single crop regardless of whether they are being grown for seed or ware markets.

See the list of arable crops to meet the requirements of crop diversification at Annex D.

Helpful tips

• if you wish to carry out any production or maintenance on fallow land within May and June, you should use the uncropped arable land (UCAA) crop code, noting that this land is not eligible as EFA fallow land

Recent changes

Section	Change
I'm organic - am I exempt?	Confirmation that organic land in conversion may be exempt from Greening, EFA and crop diversification
What land is included in calculation	Clarification of guidance and update to remove LIEM-A code, in line with SAF 2016

Previous versions

Previous versions of this guidance

Download guidance

Click 'Download this page' to create a printable version of this guidance you can save or print out.

Ecological Focus Areas Page 1 of 16

Ecological Focus Areas

Date published: 12 March, 2016

To see recent changes to this guidance, check the bottom of the page.

Table of Contents

What is an Ecological Focus Area?

I'm organic - am I exempt?

Do the EFA requirements apply to me?

What counts as arable land?

How much does each of these options contribute to my EFA commitment?

Where can I put my EFA?

Mapping requirements - new for 2016

Types of EFA

EFA fallow land (EFAFAL)

EFA buffer strips (EFABUF)

EFA field margins (EFAFM)

EFA catch crop (EFACC)

EFA green cover (EFAGC)

EFA nitrogen-fixing crops (EFANFIX)

General tips for all EFA options

Recent changes

Previous versions

Download guidance

What is an Ecological Focus Area?

An Ecological Focus Area (EFA) is an area of land upon which you carry out agricultural practices that are beneficial for the climate and the environment. The main aim of an EFA is to improve biodiversity. There are six EFA options that can be used on their own or in combination to meet the EFA commitment:

- fallow land
- buffer strips
- field margins
- · catch crops
- green cover
- nitrogen-fixing crops

If the EFA requirements apply to you, it means at least five per cent of your calculated arable area must be put into one or more of the six types of EFA. You will not be penalised for claiming and managing more than five per cent of EFA.

I'm organic - am I exempt?

If all of your holding (all of the land claimed on your SIngle Application Form) is certified as organic or in organic conversion, the Ecological Focus Area (EFA) requirements do not apply to you.

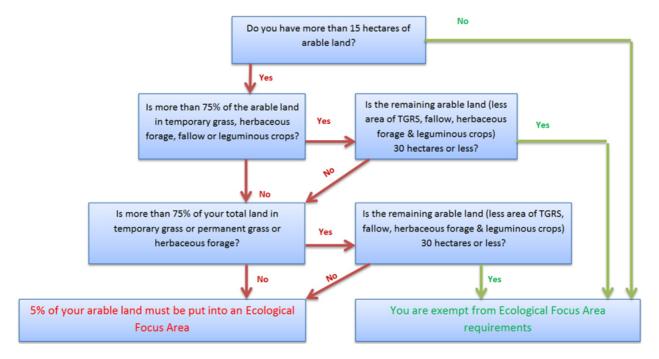
If part of your holding is certified as organic or in organic conversion, the claimed areas that are not certified as organic or in organic conversion need to be considered for your EFA requirements.

If your holding is only partly organic, you may choose not to benefit from the exemption for organic land. Instead, you may choose to meet your Greening requirements across all of your arable land.

Ecological Focus Areas Page 2 of 16

Do the EFA requirements apply to me?

We have also compiled a table in Annex B, which you will find helpful in identifying your EFA requirements. Areas of land are those claimed for the Basic Payment Scheme.



What counts as arable land?

For the purposes of calculating your EFA requirement, your arable land must include all of the land used to grow arable crops, fallow, temporary grassland, leguminous crops and herbaceous crops that you claim for the Basic Payment Scheme.

If you use some of your permanent grassland area as EFA (for example, a buffer strip or field margin, this means that this area of EFA on your permanent grassland is now classed as arable land. You will claim it as permanent cover on your Single Application Form and it will be added to your total arable area calculation. An example would be:

Total area of holding = 125 ha Total arable area = 100 ha EFA is 5% = 5 ha

If all the five hectares of EFA is sited on permanent grassland this would now become arable and would be added to give your new total arable area, for the purpose of Greening.

Therefore: (original total arable area) 100 ha + 5 ha (EFA) = 105 ha (new total arable area). New area of EFA required is now 5.25 ha.

When calculating your arable area you should ensure that you include any land that is fallow, any land in an EFA buffer or EFA field margin and any land that is currently in an agri-environment scheme that does not allow production, which was formerly arable. For example:

- beetlebanks
- grass margins
- · water margins where grazing is excluded

Permanent crops are not included in the calculation of your arable area (see the Glossary for a definition of permanent crops).

How much does each of these options contribute to my EFA commitment?

Ecological Focus Areas Page 3 of 16

The European Commission has set out a number of weighting factors for the different types of EFA which will contribute to each EFA option. These factors allow for the fact that certain types of EFA deliver higher levels of environmental benefit.

When calculating your EFA obligation you will measure the actual area of the EFA feature and multiply by the appropriate weighting factor to give the equivalent area of EFA. The weighting factors are:

EFA	Location	Weighting factor
Fallow	On arable land	1
Buffer strips	On, adjacent to or within five metres of arable land	1.5
Field margins	On, adjacent to or within five metres of arable land	1.5
Nitrogen-fixing crops	On arable land	0.7
Catch crop	On arable land	0.3
Green cover	On arable land	0.3

For example, spring barley under-sown with grass as a catch crop with a weighting factor of 0.3 – this means that 10 hectares of catch crop counts as three hectares towards your EFA requirements.

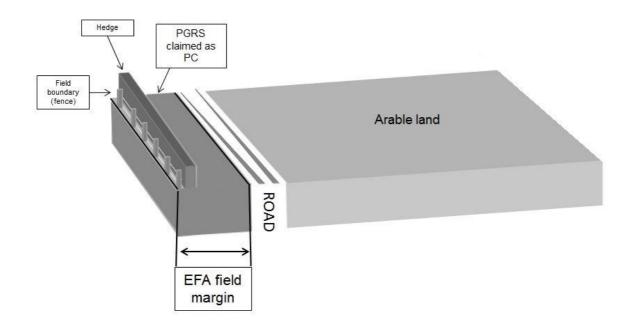
Where can I put my EFA?

To be eligible to support EFA the land must be:

- · used by the claimant
- on a claimed agricultural parcel
- on Basic Payment Scheme eligible land

You must locate your EFA fallow, EFA catch crop, EFA green cover and EFA nitrogen-fixing crops on arable land.

EFA field margins and EFA buffer strips must be on, adjacent to, or within five metres of arable land. This diagram is an example of a field margin on permanent grassland within five metres of arable land. In this example the road is less than five metres wide.



Additional examples of buffer / field margins in relation to being adjacent to arable land can be found below in the field margins section.

Ecological Focus Areas Page 4 of 16

Mapping requirements – new for 2016

If you undertake any EFA on your holding you will be required to submit a map detailing the type, location and size of each EFA feature. Please see an example at Annex J, which was prepared using a blank map from Rural Payments and Services.

Types of EFA

The following sections describe each type of EFA. Each EFA option has its own unique management requirements. You should consider carefully which EFA options you wish to implement to suit your circumstances.

EFA fallow land (EFAFAL)

EFA fallow land is arable land that has no crop production or grazing on it from 15 January to the 15 July inclusive.





Above pictures: (left) EFA fallow – example of natural regeneration and (right) EFA fallow –example of wild flower mix (two species)

What land is eligible to support EFA fallow?

Your land:

- must be arable land
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form
- must have been in the preceding year fallow or an arable crop (including temporary grass; years 1–4)
- must be a minimum of 0.01 hectares in size
- must be clearly identifiable and distinguishable on the ground from 15 January to 15 July inclusive

Requirements for EFA fallow

You must:

- submit an EFA map with your Single Application Forms, detailing the location and size of your EFA fallow land (see Annex J, EFA Maps)
- control injurious weeds, invasive weeds and other weed species by spot herbicide application or hand roguing (see details of GAEC in the Overview)

You must not:

- undertake agricultural production between the dates of 15 January to 15 July inclusive. For example, this includes areas of land used in the establishment and growing of a crop
 - you must not store materials (irrigation pipes, fuel bowsers, seed boxes)
 - you must not use for the turning of machinery

Ecological Focus Areas Page 5 of 16

- you must not use for access (except for occasional use)
- undertake maintenance such as drainage between the dates of 15 January and 15 July inclusive
- change the land cover within the fallow period 15 January to 15 July inclusive with the exception
 of establishing a wild flower or wild bird seed mix
- top the fallow between the dates of 15 January to 15 July inclusive
- apply any fertiliser, except to aid in the establishment of a wild flower mix or wild bird seed mix in the area of fallow from 15 January to 15 July inclusive
- apply any pesticides to the area of fallow from 15 January to 15 July inclusive, except by spot herbicide application; (refer to the Overview for guidance on GAEC requirements)

You are allowed to:

- change the ground cover to establish a wild flower or wild bird seed mix within the fallow area
- temporarily store farm yard manure for that field

Helpful tips for EFA fallow land

- if you choose to put temporary grass in fallow the land retains its arable status for the period it is claimed as EFA fallow even if the grass is more than five years old
- if you've claimed temporary grass as EFA fallow in one year and decide not to claim this as EFA fallow in the following year, it will revert to being temporary grass if it's five years or younger, or permanent grass if it's older than five years
- if you are unsure if your use of an area for access or tracking is more than occasional use, i.e. rights of way, then you should not use this as an EFA fallow area
- you may be asked to provide a seed label if one element of your wild bird seed mix or wild flower mix fails, to prove eligibility
- if weed control is a problem, then you may consider establishing a wild flower mix or wild bird seed mix to aid weed control. See the Overview for guidance on GAEC requirements

EFA buffer strips (EFABUF)

Buffer strips are areas of land that help to benefit water quality and biodiversity from 1 January to 31 December inclusive.

What land is eligible to support EFA buffer strips?

Your land:

- must be on, adjacent to, or within five metres of arable land in such a way that their long edges are parallel to the water course being buffered
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form
- must provide a buffer to a water course
- must be between two and 20 metres wide
- does not need to meet the water's edge but must stop at the water's edge
- must be a minimum of 0.01 hectares in size
- must be clearly identifiable and distinguishable on the ground from 1 January to 31 December inclusive

You must:

- submit an EFA map with your Single Application Form, detailing the location and size of your EFA buffer strips (see Annex J, EFA Maps)
- control injurious weeds, invasive weeds and other weed species by spot herbicide application
 or hand roguing (although you must not breach GAEC refer to the Overview for guidance on
 GAEC requirements)

You must not:

- undertake agricultural production from 1 January to 31 December inclusive
- carry out topping, as any left material could provide a source of nutrients, which could get into the water course
- graze the EFA buffer strip from 1 January to 31 December inclusive
- apply any pesticides to the EFA buffer strip with the exception of herbicide for the spot treatment of injurious weeds. See the Overview for guidance on GAEC requirements
- clean ditches and spread the spoil on any area which has been claimed as an EFA buffer strip

Ecological Focus Areas Page 6 of 16

You are allowed to:

- change the cover to establish a wild flower mix, wild bird seed mix or a grass sward
- cut for silage or hay. But if you cut the EFA buffer strip, you must remove all cuttings

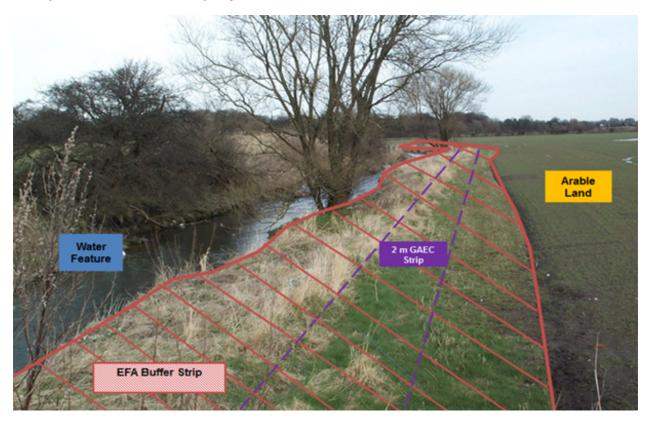
Helpful tips for EFA buffer strips

- the EFA buffer strip may include eligible landscape features such as hedges (up to three metres wide)
- if the area of the EFA buffer strip includes land ineligible for your Basic Payment this must be deducted from the area of the buffer strip claimed
- any permanent grassland claimed as an EFA buffer strip is considered as 'arable' for the purposes of the EFA arable calculation and should be claimed as Permanent Cover (PC) on your Single Application Form
- if you intend to top these areas you should claim and manage these areas as EFA field margins, which provides this flexibility
- when cutting you should be sympathetic to ground nesting birds by avoiding nesting periods

Examples of EFA buffer strips

The following illustrations are examples of EFA buffer strips, however you should note these are indicative examples to help you when considering your EFA requirements. If you are unsure if your chosen area is eligible to count towards an EFA buffer strip, please contact your local area office with details and they will provide further guidance.

Example one - EFA buffer strip adjacent to arable land

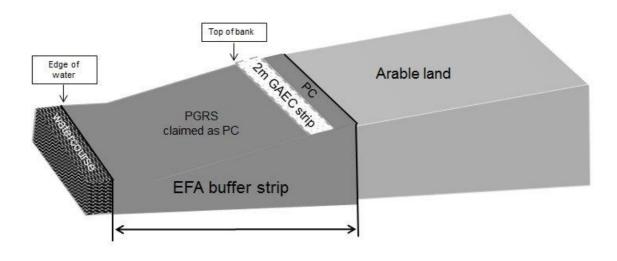


The EFA buffer strip starts at the edge of the arable land and runs parallel with the water feature. The EFA buffer strip stops at the water's edge. The EFA buffer strip must be between two and 20 metres wide. It does not need to meet the water's edge but must stop at the water's edge.

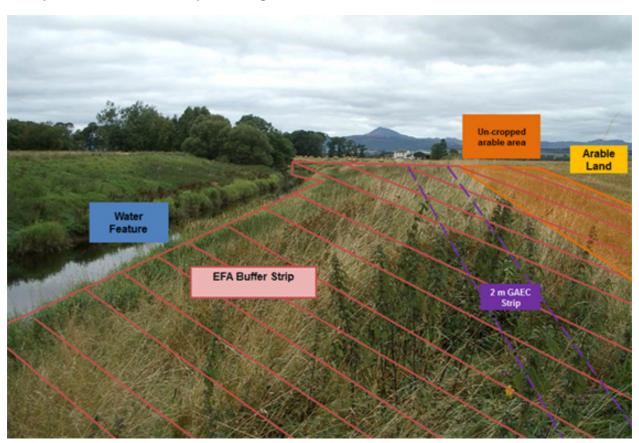
There is a requirement to maintain a two metre wide, uncultivated buffer strip at the top of the bank. This is part of the Good Agricultural and Environmental Condition (GAEC), this can be included in the EFA buffer strip area. See the Overview for guidance on GAEC requirements.

In this example the defined edge of the EFA buffer strip is the start of the cropped field and the width of the EFA buffer strip must be between two and 20 metres wide.

Ecological Focus Areas Page 7 of 16



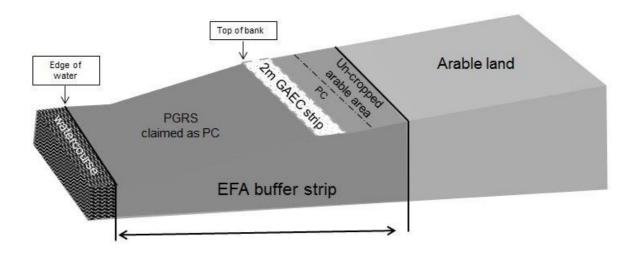
Example two - EFA buffer strip including arable land



The EFA buffer strip starts on the arable land. There is a requirement to maintain a two metre wide, uncultivated buffer strip at the top of the bank.

This is part of the Good Agricultural and Environmental Condition (GAEC), this can be included in the EFA buffer strip area. Refer to the Overview for guidance on GAEC requirements.

Ecological Focus Areas Page 8 of 16



In this instance the farmer has chosen to extend the EFA buffer strip into the arable field and will leave this area in stubble (natural regeneration) for the duration of the claimed period (at least 1 January to 31 December inclusive).

Additional examples for implementing the five metre adjacent rule for EFA buffer strips and field margins can be found in the section below - field margins.

EFA field margins (EFAFM)

Field margins provide an important habitat for farmland biodiversity and contribute to wildlife and ecological networks from 1 January to 31 December inclusive.

What land is eligible to support EFA field margins?

Your land:

- must be on, adjacent to, or within five metres of arable land
- can be around the margin of a field or splitting two crops within a field
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form
- must be between one and 20 metres wide
- must be a minimum of 0.01 hectares in size
- must be clearly identifiable and distinguishable on the ground from 1 January to 31 December, inclusive

Requirements for EFA field margins

You must:

- submit an EFA map with your Single Application Form, detailing the location and size of your EFA field margins. See Annex J
- control injurious weeds, invasive weeds and other weed species by spot herbicide application or hand roguing. You must not breach GAEC – refer to the Overview for guidance on GAEC requirements

You must not:

- undertake agricultural production from 1 January to 31 December inclusive
- graze the EFA field margin in the period 1 January to 31 December inclusive
- apply any pesticides to the EFA field margin with the exception of herbicide for the spot treatment of injurious weeds, invasive weeds and other weed species. Refer to the Overview for guidance on GAEC requirements
- apply any fertiliser with the exception that you may apply fertiliser to aid the establishment of wild bird seed mix, wild flower mix or grass

Ecological Focus Areas Page 9 of 16

You are allowed to:

- change the cover to establish a wildflower mix, wild bird seed mix or a grass sward
- apply fertiliser to aid establishment of wild bird seed mix, wild flower mix or grass
- carry out topping after 31 August, but the cut material must not be removed (i.e. EFA field margin cannot be used for hay or silage)

Helpful tips for EFA field margins

- hedges and ditches defined as eligible landscape features (hedges up to three metres wide and ditches up to two metres wide) under GAEC, may be included as part of an EFA field margin
- if you have existing beetle banks created under a previous agri-environment scheme this can be included in an EFA field margin. However this may result in potential double funding and a reduction in your agri-environment payment
- if land was sown out a number of years previously and is now permanent grassland (i.e. more than five years old) the area is still eligible for an EFA field margin if it is within five metres of arable land
- if the area of the EFA field margin includes land ineligible for your Basic Payment this must be deducted from the area of the EFA field margin claimed
- any permanent grassland claimed as an EFA field margin is considered as 'arable' for the purposes of the Greening calculation (EFA and crop diversification) and should be claimed as permanent cover on your Single Application Form
- if the EFA field margin splits two crops these can be the same crop (such as a field of winter barley split in two by an EFA field margin)
- you must ensure that the EFA field margin is maintained from 1 January to 31 December inclusive, in the claimed year. If, for example, the crop in the field is grass, cropped as silage and you wish to graze the aftermath before 31 December inclusive, you must exclude stock from the EFA field margin

Examples of EFA field margins

The following illustrations provide examples of EFA field margins. Please note – these are indicative examples to help you when considering your EFA requirements. If you are unsure if your chosen area is eligible to count towards an EFA field margin, please contact your local area office with details and they will provide further guidance.

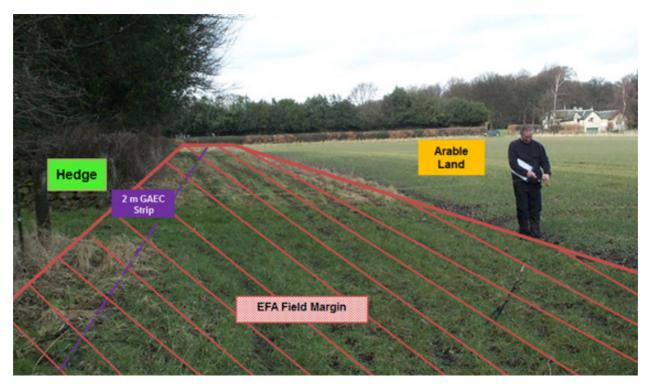
Example one - EFA field margin in an arable field



Ecological Focus Areas Page 10 of 16

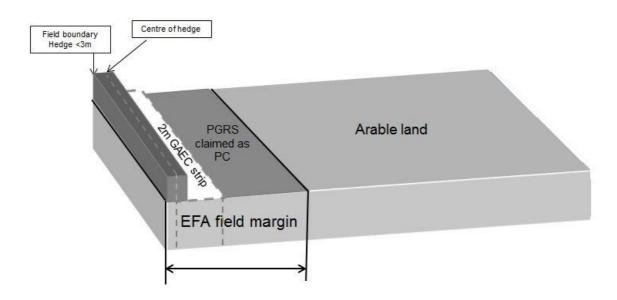
Above is an existing grass field margin (possibly a former agri-environment option or a field margin established in grass) running from the fence to the edge of an arable crop. The EFA field margin is between one and 20 metres wide on arable land and will not be subject to agricultural production for the period 1 January to 31 December inclusive.

Example two – EFA field margin adjacent to hedge including GAEC strip



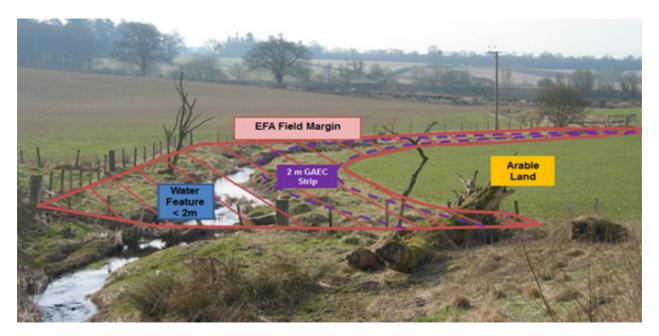
The example above is an EFA field margin (on which the farmer has chosen to establish grass) running from the centre line of the hedge to the edge of an arable crop. The EFA field margin is between one and 20 metres wide on arable land and will not be subject to agricultural production for the period 1 January to 31 December inclusive.

In this instance, there is a GAEC requirement to maintain a two metre wide, uncultivated strip from the centre line of the hedge (as detailed above). The two metre GAEC strip can be included in the EFA field margin. Refer to the Overview for guidance on GAEC requirements.



Example three – EFA field margin including GAEC and Basic Payment Scheme eligible landscape feature

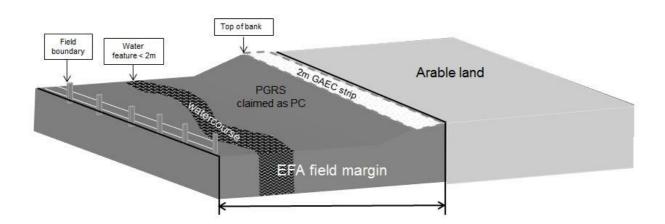
Ecological Focus Areas Page 11 of 16



In the example above, the farmer has chosen to include an area from the fence to the edge of the cropped land including, as part of the EFA field margin, the water feature as it is less than two metres wide (a Basic Payment Scheme eligible landscape feature) and the two metre wide, uncultivated GAEC buffer strip for the water feature.

The two metre wide GAEC buffer strip starts at the top of the bank (not from the water's edge). Refer to the Overview for guidance on GAEC requirements.

This permanent grassland, if claimed as an EFA field margin is considered as 'arable' for the purposes of the Greening calculation (EFA and crop diversification) and should be claimed as Permanent Cover (PC) on your Single Application Form.



Additional examples for implementing the five metre adjacent rule for EFA field margins/buffer strips

Option 1.

A parcel of arable land has a three metre road on its boundary. The applicant wishes to claim an EFAFM on an adjacent parcel using the five metre adjacent rule.

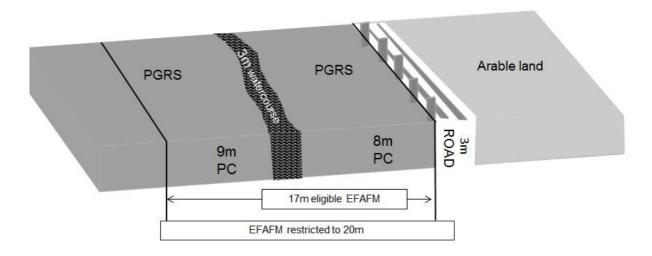
Where do I start measuring the EFAFM from?

As the Permanent Grass (PGRS) is within five metres of arable land, we would claim this EFA supporting land cover as Permanent Cover (PC) and we would not include the road in the EFAFM area.

Ecological Focus Areas Page 12 of 16

We would start measuring from the eligible land cover which is within five metres of the arable land. This width would be restricted to a maximum of 20 metres from this point. Any ineligible features found within this area would be excluded from the found area.

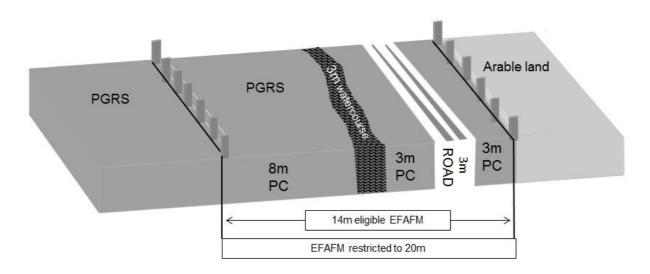
All EFA areas would be claimed within the parcel it is located. In this example, 17 metres of eligible EFAFM is claimed.



Option 2.

The field margin starts directly adjacent to arable land. In this example, we would start measuring from the edge of the arable land. This width would be restricted to a maximum of 20 metres.

Any ineligible features found within this area would be excluded from the found area. In this example, a 20 metre width would be captured but the road and water would be excluded, resulting in an eligible width of 14 metres for EFAFM.



EFA catch crop (EFACC)

In Scotland, the only catch crop you can grow will be a cereal nurse crop with under sown grass as the catch crop. A catch crop will provide an enhancement to biodiversity and prevent soil erosion.

Ecological Focus Areas Page 13 of 16





Pictures above: EFA catch crop - barley under-sown with grass

What land is eligible to support EFA catch crop?

Your land:

- must be arable land
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form
- must be a minimum of 0.01 hectares in size
- must be clearly identifiable and distinguishable on the ground

Requirements for EFA catch crop

You must:

- submit an EFA map with your Single Application Form, detailing the location and size of your EFA catch crop. See Annex J for more information
- the main crop will be under sown with a recognised grass seed mix
- establish the EFA catch crop between 1 March and 1 August inclusive
- retain the EFA catch crop until 31 December, inclusive

You must not:

 incorporate and sow any EFA catch crop to a winter crop in the autumn (prior to 31 December) of the year that it is claimed as an EFA

You are allowed to:

graze the EFA catch crop after harvest of the main crop

Helpful tips for EFA catch crop

- Arable Silage for Stock Feed (ASSF) is not eligible for EFA catch crop, as it is not a main crop as defined in the Regulations
- it would be helpful to retain the seed label to prove eligibility, if your EFA catch crop fails

EFA green cover (EFAGC)

Green cover is the establishment of a temporary crop in the autumn that will provide an enhancement to biodiversity, improve soil structure and will prevent soil erosion.

What land is eligible to support EFA green cover?

Your land:

- must be arable land
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form

Ecological Focus Areas Page 14 of 16

- must be a minimum of 0.01 hectares in size
- must be clearly identifiable and distinguishable on the ground

Requirements for EFA green cover

You must:

 submit an EFA map with your Single Application Form, detailing the location and size of your EFA green cover. See Annex J for more information

- establish the EFA green cover between 1 March and 1 October inclusive
- maintain the EFA green cover up to the 31 December inclusive
- establish a green cover consisting of two or more of only the following crops: alfalfa, barley, clover, mustard, oats, phacelia, radish, rye, triticale, vetch

You must not:

- incorporate and sow any green cover to a winter crop in the autumn (prior to 31 December) of the year that it is claimed as an EFA
- use EFA green cover to support any agricultural production, e.g. no grazing
- take to harvest any crop sown as EFA green cover

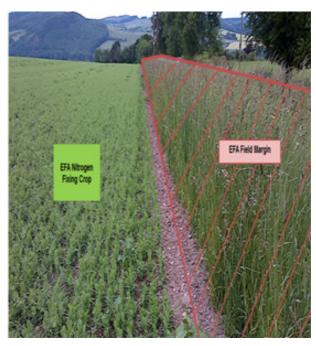
Helpful tips for EFA green cover

- you may be asked to provide a seed label to prove eligibility, if one element of your EFA green cover fails
- if you intend to sow your EFA green cover immediately after harvesting another crop, you must remember you are required to establish it by 1 October. If you are in any doubt about your ability to establish the crop by 1 October you should choose another EFA option

EFA nitrogen-fixing crops (EFANFIX)

These are plants that contain symbiotic bacteria called *Rhizobia* within the nodules of their root systems, producing nitrogen compounds that help the plant to grow and compete with other plants. When the plant dies, the fixed nitrogen is released; making it available to other plants and this helps to fertilise the soil.





Pictures above: EFA nitrogen-fixing crops with associated claimed EFA field margins

What land is eligible to support EFA nitrogen-fixing crops?

Your land:

- must be arable land
- must be on your holding, on a claimed, Basic Payment Scheme eligible, agricultural parcel and claimed on your Single Application Form
- must be a minimum of 0.01 hectares in size

Ecological Focus Areas Page 15 of 16

must be clearly identifiable and distinguishable on the ground

Requirements for EFA nitrogen-fixing crops

From 2016 there is an additional requirement to ensure that there are at least two different, claimed EFA nitrogen-fixing crops on your EFA area to extend the flowering period for pollinators.

You must:

- grow two or more of the following nitrogen-fixing crops:
 - alfalfa
 - beans (including Faba beans)
 - birdsfoot trefoil
 - chickpea
 - clover
 - lentil
 - lupin
 - peas
 - vetch
- submit an EFA map with your Single Application Form, detailing the location and size of your EFA nitrogen-fixing crops. See Annex J
- ensure that all your claimed EFA nitrogen-fixing crops are surrounded by a claimed EFA field margin. The field margin must meet the EFA field margin rules, including retention and management until 31 December inclusive
- claim two distinct crops, that should be grown independently of each other and not as a mixture
- ensure that the main nitrogen-fixing crop is less than 75 per cent of the total area of nitrogen-fixing crops claimed as EFA

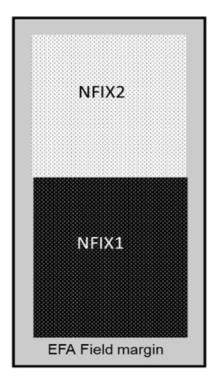
You must not:

harvest the crop before 1 August in order to protect ground-nesting birds

Helpful tip for EFA nitrogen-fixing crops

• the associated EFA field margin must meet the EFA field margin rules and be claimed as EFA. If you wish to graze the aftermath of the nitrogen-fixing crops, livestock must be excluded from the EFA field margin from 1 January to 31 December inclusive.

The following example shows an EFA field margin surrounding EFA nitrogen-fixing crops:







Ecological Focus Areas Page 16 of 16

General tips for all EFA options

 land managed for EFA as field margins, fallow and buffer strips are not eligible for LFASS payments

- if you use temporary grass as EFA fallow, this land will retain its arable status for Greening
 purposes (including your commitment to have five per cent of your arable land subject to EFA and
 crop diversification). This applies for as long as you continue to use it for EFA fallow even if the
 grass becomes more than five years old
- remember your arable land includes any temporary grassland that you include in a crop rotation.
 Temporary grassland is grassland that is five years old or less. If you plough permanent grass and immediately sow a new grass ley, the land will retain its status as permanent grass and does not become temporary grass
- if you choose to claim an EFA buffer strip or EFA field margin on permanent grassland, open grazed woodland or rough grazing they must be on, adjacent to, or within five metres of arable land. You must claim this land as Permanent Cover (PC) on your Single Application Form. This permanent cover will be considered as arable land when calculating your total area of arable land for your Greening requirements including the area of EFA
- if you wish to undertake multiple EFA options in one field you can do this as long as you meet all the eligibility requirements of each and you are able to distinguish the location and extent of each option. In a practical example, this means you could have an area of fallow surrounded by a field margin
- land can only count once as EFA so as detailed above you may have different EFA options in the same field but the land can only contribute to your EFA commitment once; for example it cannot be EFA fallow and EFA green cover in the same claim year
- many elements of EFA are complementary to GAEC. This means that field margins and buffer strips along water courses or hedges can meet both GAEC and EFA requirements and be eligible land for the Basic Payment Scheme. Refer to the Overview for guidance on GAEC requirements
- there is no upper limit to the area you can manage and claim as EFA. So if you have a commitment of 10.6 hectares you can manage and claim above this figure. For example, 12.2 hectares, if you wish
- if you want to include areas in your EFA that are currently part of an agri-environment scheme you can do this. However:
 - you must ensure that the management of the two schemes are compatible (noting some agri-environment schemes require land to be grazed which would not be compatible with. For example, EFA field margins or EFA buffer strips)
 - the payment you receive for your agri-environment scheme may be reduced to reflect the Greening payment you receive for your EFA feature there may be delays in the payment of your Basic Payment as both schemes will need to be validated

Recent changes

Section	Change
I'm organic - am I exempt?	Confirmation that organic land in conversion may be exempt from Greening, EFA and crop diversification
What counts as arable land on my holding?	Clarification and removal of LIEM-A code in line with SAF 2016
EFA green cover	Change to remove the requirement to incorporate the green crop cover
EFA nitrogen-fixing crops	Additional bullet point added.

Previous versions

Previous version of this page

Download guidance

Click 'Download this page' to create a printable version of this guidance you can save or print out.

Case studies Page 1 of 3

Case studies

Date published: 12 March, 2016

For recent changes to this guidance, please check the bottom of the page .

Table of Contents

Case study one - arable farm

Case study two - dairy farm

Case study three - mixed upland farm

Case study four - hill farm

Recent changes

Previous versions

Download guidance

Here are some examples of different types of farm businesses in Scotland and how the Greening requirements affect them. This might help you when considering your Greening requirements.

Case study one - arable farm

Jack Smith is an arable farmer with 100 hectares of cropped land (arable) and 50 hectares of permanent grassland. He needs to consider each of the three greening elements:

- permanent grassland there are 50 hectares of permanent grassland on the unit but none are
 designated as Environmentally Sensitive Grassland. Jack must still complete an annual nitrogen
 fertiliser and lime plan for the permanenent grassland to meet his Greening requirement
- crop diversification Jack used the table we provided for crop diversification (Annex A) and confirmed that to meet the Greening crop diversification requirement, three separate crops must be grown

He chooses to meet this requirement with the following crops:

- 32 ha winter wheat 32%
- 28 ha spring barley 28%
- 21 ha winter oilseed rape 21%
- 4.80 ha field beans + 0.2 ha associated EFA field margins (TGRS) 5%
- 2.88 ha peas + 0.12 ha associated EFA field margins (TGRS) 3%
- 6 ha seed potatoes 6%
- 5 ha fallow 5% (EFA fallow)

Total = 100 ha arable land = 100%

There are eight crops for the purposes of crop diversification, the main crop is not more than 75 per cent of the arable area and the two main crops together are not more than 95 per cent of the arable land.

Using the table provided for EFA (Annex B), he also confirmed that to meet the EFA requirement at least five hectares (100 ha of arable land x 5% = 5 ha) must be managed as EFA. Jack's farm meets its EFA requirement by having five hectares of fallow land.

However if he decided not to choose the EFA fallow prescription, he could meet his EFA obligation with one of the following solutions:

Option A

3.4 ha of field margins or buffer strips (3.4 ha x 1.5 = 5.1 ha EFA)

Please note: if Jack includes any of his permanent grassland area as EFA i.e. a buffer strip or field margin, this will mean that the area of EFA on his permanent grassland will now be classed as arable land. He must claim it as permanent cover on his Single Application Form and it will be added to his total arable area calculation, effectively increasing his EFA requirement.

Case studies Page 2 of 3

Option B

7.68 hectares of nitrogen fixing crops (field beans 4.8 ha x 0.7 = 3.36 ha and associated EFA field margin 1m wide = 0.2 ha x 1.5 = 0.3 ha) and (peas 2.88 ha x 0.7 = 2.02 ha and associated EFA field margin 1m wide = 0.12 ha x 1.5 = 0.18 ha). Total EFA for this option is: 5.86 ha EFA

Option C

17 hectares of catch crops (17 ha x 0.3 = 5.1 ha EFA)

This is not an exhaustive list of options available to Jack, just an example of how he may choose to meet his EFA requirement.

Case study two – dairy farm

Neil Groves is a dairy farmer with 100 hectares of which 20 hectares is arable crop and 80 hectares is temporary grass. Neil needs to consider each of the three greening elements:

- permanent grassland there is no permanent grassland on the unit, Neil's farm is exempt from the permanent grassland requirement
- crop diversification Neil looked at our table on crop diversification (Annex A) and confirmed that as 75 per cent of the holding is temporary or permanent grassland there is no requirement to grow multiple crops
- EFA Neil used the table provided on EFA (Annex B) and confirmed that as 75 per cent of the holding is temporary grass and he has less than 30 hectares of arable crop, he is exempt from any EFA requirements

Case study three – mixed upland farm

Hilary Chiles is a mixed upland farmer with 120 hectares of which 85 hectares is arable land (including 40 hectares of temporary grass) and 35 hectares of permanent grassland including two designated sites of Environmentally Sensitive Grassland.

Hilary needs to consider each of the three greening elements:

- permanent grassland there are 35 hectares of permanent grassland on the unit with two areas
 designated as Environmentally Sensitive Grassland. Hilary must complete an annual nitrogen
 fertiliser and lime plan for all the permanenent grassland to meet her Greening requirement. Hilary
 must ensure that the designated grassland is not converted (ploughed or cultivated) or improved.
 She is familiar with the land as it is designated as a Site of Special Scientific Interest (SSSI) which
 has been notified and regularly reviewed by Scottish Natural Heritage
- crop diversification Hilary used our table on crop diversification (Annex A) and confirmed that at least three crops must be grown

She chooses to meet this requirement with the following crops:

- 15 ha spring barley, under sown with grass 17.6%
- 20 ha winter barley 23.5%
- 40 ha of temporary grass 47.1%
- 10 ha of turnips 11.8%

Total = 100% Two main crops total (23.5% + 47.1%) = 70.6%

There are four crops for the purposes of crop diversification. The main crop is not more than 75 per cent of the arable area and the two main crops together are not more than 95 per cent of the arable land.

Hilary checked our table on EFA (Annex B) and confirmed that to meet the EFA requirement at least 4.25 hectares (85 hectares of arable land x 5 per cent = 4.25 hectares) must be managed as EFA.

Hilary's farm could meet its EFA requirement by having at least:

- 4.25 ha of fallow land (4.25 ha x 1 = 4.25 ha EFA) or
- 2.84 ha of field margins or buffer strips (2.84 ha x 1.5 = 4.26 ha EFA) or

Case studies Page 3 of 3

14.17 ha of catch crops (14.17 ha x 0.3 = 4.25 ha EFA)
 or

• a combination of these to meet the required EFA commitment

Case study four – hill farm

David Logan is a hill farmer with 198 hectares of which four hectares is forage rape, 24 hectares temporary grass and 170 hectares permanent pasture. David needs to consider each of the three greening elements:

- permanent grassland there are 170 hectares of permanent grassland on the unit but none are designated as Environmentally Sensitive Grassland. David completes an annual nitrogen fertiliser and lime plan for all the permanent grassland to meet his Greening requirement. His farm is now "green" as far as permanent grassland requirements are concerned
- crop diversification David looked at our table on crop diversification (Annex A) and found
 that he is exempt from crop diversification as more than 75 per cent of the holding is grassland
 (TGRS) or herbaceous forage (PGRS) and that his remaining arable land (less area of TGRS and
 herbaceous forage) is four hectares so is less than 30 hectares
- EFA David used our table on EFA (Annex B) and does not have an EFA requirement as:
- his arable land is more than 15 hectares and less than or equal to 30 hectares
- more than 75 per cent of his arable land is temporary grass (TGRS, fallow, herbaceous forage or leguminous crops)
- more than 75 per cent of his business is grassland (PGRS and TGRS) and herbaceous forage

Recent changes

Section	Change
Case studies one, three and four	Clarification on permanent grassland new nitrogen fertiliser and lime plan

Previous versions

Previous versions of thus guidance

Download guidance

Click 'Download this page' to create a printable version of this guidance you can save or print out.

Glossary Page 1 of 2

Glossary

Date published: 15 October, 2015

Arable land

Arable land means land cultivated for crop production, including areas that are temporary grassland (grass up to five years old following an arable or break crop). It also includes areas of land which are available for crop production but which are lying fallow. It does not include areas under permanent crops (see below). The initial 100 per cent arable area figure, used for the crop diversification calculation, will be the area of determined arable land which is the arable land claims across the business following validation/inspection.

If you choose to claim an EFA buffer or EFA field margin on permanent grassland, open grazed woodland or rough grazing; it must be adjacent to, or within five metres of arable land. You must claim this land as Permanent Cover (PC) on your Single Application Form (SAF). This Permanent Cover will be considered as arable land when calculating your total area of arable land for your Greening requirements, including the area of EFA.

If you have arable land registered for organic production or in organic conversion you may choose not to include this as arable land.

Arable crops

Land with arable crops including temporary grass and land lying fallow which is claimed by the business. It does not include arable land used for organic production. See Annex D for Arable crop list.

Grass in a long rotation

Areas of grass which are more than five years old, including those that have been reseeded as grass without a break crop (arable or catch crop), are considered to be permanent grass and therefore do not count as arable area.

Agricultural area

Agricultural area means any area taken up by arable land, permanent grassland or permanent crops.

Good Agricultural and Environmental Condition (GAEC)

Good Agricultural and Environmental Condition (GAEC) refers to a set of European Union standards which are aimed at sustainable agriculture. Keeping land in good agricultural and environmental conditions is related to issues such as soil erosion, maintaining the total area of grassland and soil organic matter.

Many elements of EFA are complementary to GAEC. This means that field margins and buffer strips along hedges and water courses can count for both GAEC and EFA and as eligible land for the Basic Payment Scheme. (Refer to Overview for guidance on GAEC requirements).

Surface water

This can include coastal water, lochs, rivers, burns, streams and ditches which contain free water and also temporarily dry ditches.

Injurious weeds

These are species specified in the Weeds Act 1959:

- spear thistle (Cirsium vulgare (Savi) Ten.)
- creeping or field thistle (Cirsium arvense (L.) Scop.)
- curled dock (Rumex crispus L.)
- broad-leaved dock (Rumex obtusifolius L.)
- common ragwort (Senecio jacobaea L.)

Invasive species

This means:

Glossary Page 2 of 2

- giant hogweed (Heracleum mantegazzianum)
- Japanese Knotweed (Fallopia japonica)
- Himalayan balsam (Impatiens glandulifera)
- rhododendron (Rhododendron ponticum)

Hedge

A hedge means any hedge which has a length of at least 20 metres or a length of less than 20 metres where it meets another hedge at each end. Any gap of less than 20 metres is treated as being part of the hedge.

Claimed

European Commission regulations require beneficiaries to claim for eligible land when applying for support under a scheme, such as the Basic Payment Scheme.

Declared

The Commission requires that a beneficiary must record all the agricultural land on their holding on their annual Single Application Form.

Temporary grassland

Temporary grassland is land that has been in grass or other herbaceous forage for five years or less, (included in Annex D).

Permanent grassland

Permanent grassland (or permanent pasture) means land used to grow grasses or other herbaceous forage (such as clover) naturally (self- seeded, including rough grazing) or through cultivation (sown), and which is more than five years old.

This definition includes areas of rough grazing. It may also include other species such as shrubs and/or trees which can be grazed, provided that the grasses and other herbaceous forage remain predominant.

Alternatively, where member states so decide, land which can be grazed and which forms part of established local practices where grasses and other herbaceous forage are traditionally not predominant in grazing areas and can be classed as permanent grassland. See Permanent grassland options, Annex E.

Permanent crops

Means non rotational crops other than permanent grassland and permanent pasture (including rough grazing) that occupy the land for five years or more and yield repeated harvests, including nurseries and short rotation coppice. See permanent crops, Annex F.

Organic land

Land that is in conversion or maintenance and has been certified by a recognised certifying body.

Cross-border farming

Every farm business needs to be sure that it is meeting relevant Greening requirements and this includes businesses that have farms in different parts of the UK.

A cross-border business would need to meet the crop diversification requirement across the business as a whole. A cross-border business could grow a mix of crops on each of its farms no matter where they are located or, the business could grow different crops in different parts of the UK. For example, as long as the business overall meets the crop diversification requirement, it could chose to grow spring barley in Scotland, potatoes in England and temporary grass in Wales.

A cross-border farming business would also need to meet its EFA requirement across the business as a whole. This means that the requirement could be met in just one part of the UK. Where the EFA requirement is delivered in different parts of the UK, the measures will need to meet the conditions set in the country in which the EFA is located, i.e. meet English conditions for EFA in England and meet Scottish conditions for EFA in Scotland.

Annex A

You will find these tables useful to determine what Greening requirements apply specifically to you.

Crop diversification

Permanent grassland	Arable Land	>75% of TGRS, fallow and herbaceous forage	>75% of Business is grassland (PGRS and TGRS) and herbaceous forage	Area of arable land less area of TGRS, fallow and herbaceous forage	Crop Diversification
None	<10	Y or N	NA		Exempt
None	≥10 ≤ 30	Υ	NA		Exempt
None	≥10 ≤ 30	N	NA		2 crop
None	>30	Υ	NA	≤ 30	Exempt
None	>30	N	NA	≤ 30	3 crop
None	>30	Υ	NA	>30	3 crop
None	>30	N	NA	>30	3 crop
Yes	<10	Y or N	Y or N		Exempt
Yes	≥10 ≤ 30	Υ	Y or N		Exempt
Yes	≥10 ≤ 30	N	Υ		Exempt
Yes	≥10 ≤ 30	N	N		2 crop
Yes	>30	Y	Y or N	≤ 30	Exempt
Yes	>30	N	Y	≤ 30	Exempt
Yes	>30	N	N	≤ 30	3 crop
Yes	>30	Y or N	Y or N	>30	3 crop

Symbol	Meaning
PGRS	Permanent
	grassland
TGRS	Temporary
	grassland
>	Greater than
≥	Greater than or
	equal to
<	Less than
≤	Less than or equal
	to

Annex B
Ecological Focus Area (EFA)

Permanent grassland	Arable Land	>75% of TGRS, fallow, herbaceous forage or leguminous crops	>75% of Business is grassland (PGRS and TGRS) and herbaceous forage	Area of arable land less area of TGRS, fallow, herbaceous forage and leguminous crops	Ecological Focus Area (EFA)
None	≤ 15	Y or N	NA		Exempt
None	>15 ≤ 30	Y	NA		Exempt
None	>15 ≤ 30	N	NA		EFA
None	>30	Υ	NA	≤ 30	Exempt
None	>30	N	NA	≤ 30	EFA
None	>30	Y or N	NA	>30	EFA
Yes	≤15	Y or N	Y or N		Exempt
Yes	>15 ≤ 30	Υ	Y or N		Exempt
Yes	>15 ≤ 30	N	Υ	_	Exempt
Yes	>15 ≤ 30	N	N		EFA
Yes	>30	Υ	Y or N	≤ 30	Exempt
Yes	>30	N	Υ	≤ 30	Exempt
Yes	>30	N	N	≤ 30	EFA
Yes	>30	Y or N	Y or N	> 30	EFA

Symbol	Meaning
PGRS	Permanent
	grassland
TGRS	Temporary
	grassland
>	Greater than
≥	Greater than or
	equal to
<	Less than
≤	Less than or equal
	to

Annex C

Guidance on the use of Nitrogen fertiliser and lime

In order to deliver climate change benefits, all claimants for the Basic Payment Scheme are required to maintain a Nitrogen Fertiliser and Lime Plan for their claimed permanent grassland fields that contain no arable land and/ or rough grazings.

This involves recording the amount of inorganic nitrogen and lime you intend to apply in each permanent grassland field for that scheme year.

Two of the main limitations to grassland production that farmers can manage are nitrogen (N) and soil pH. The efficient and profitable use of nitrogen and other plant nutrients in grassland can only be achieved if the pH is maintained at optimum levels and the soil structure and drainage are maintained in good condition.

Improving farm soil and making best use of nutrients can make your business more efficient by:

- reducing costs
- · reducing diffuse pollution risks
- reducing greenhouse gases implicated in climate change

A study of agricultural soils in 2013 in Ayrshire found that 73 per cent of grassland soils were being managed below optimal pH status. This is both a production and an environmental issue as the fertilisers applied are being used less efficiently.

This poses a potential risk to the environment from the emission of greenhouse gases, such as nitrous oxide and pollution of watercourses.

For soils with a pH lower than seven, natural processes (e.g. rainfall, crop growth and leaching in drainage water) and some farming practices (e.g. use of some nitrogen fertilisers) tend to acidify soil.

Acidifying processes can cause soil pH to fall quite quickly, particularly in sandy soils, and regular pH checks every four to five years are required

Soil pH impacts on the plant availability of the P and K fertilisers you apply and has a role in determining nitrogen use efficiency.

Soils in Scotland naturally have a low pH. It ranges from about pH 4 (very acid), when most crops will fail, to about pH 8 (alkali) for soils naturally rich in calcium or magnesium carbonate. Maintaining the optimum pH in the topsoil in all parts of the field is important to achieve optimum yields and consistent quality.

Where the pH status of the soil is too low, applying lime is a simple and effective way to increase grassland productivity.

For each field the amount of lime to apply will depend on the current soil pH, texture, organic matter and the optimum pH needed. Clay and organic soils need more lime than sandy soils to increase pH by one unit. A lime recommendation is usually for a 20 cm depth of cultivated soil and seven cm for grassland soil.

<u>SRUC Technical Note TN656: 'Soils information, texture and liming</u>
<u>recommendations'</u> provides lime recommendation rates required for each soil types to achieve the optimum pH level.

Nitrogen is an essential element for plant growth and is needed to achieve good yields. Plant available nitrogen (N) is naturally scarce and the rate and timing of its application is central to profitable crop production.

Unlike other nutrients, soil testing is not used to determine nitrogen requirements. Rates and timing are based on crop type, establishment practices and yield requirements and these are available from the SRUC Technical Note TN652 'Fertiliser recommendations for grassland'.

This technical note can be used along with <u>PLANET Scotland</u>, a free software tool designed for routine use by Scottish farmers and consultants to plan and manage nutrient use on individual fields.

Overall, good soil management using soil testing on permanent grassland can have the following benefits:

- optimising nutrient use reduces costs
- maximise grassland productivity
- reduce nitrogen escaping to the atmosphere as nitrous oxide, a powerful greenhouse gas
- reduce nitrogen escaping into the water environment

Further information of other practical steps that can be taken to reduce your carbon footprint and save your business money can be found at SRUC Farming for a Better Climate webpages.

Nitrogen fertiliser and lime plan template

The following example template can be used for your nutrient plan.

Nitrogen fertiliser and lime plan

Main farm Code: 00/111/1111

Scheme year: 2016

LPID number	Inorganic Nitrogen		Application of Lime		
	Do you intend	If yes,	Do you intend	If yes,	
	to apply	approximate	to apply Lime	approximate	
	inorganic	quantity or	to this parcel	quantity or	
	Nitrogen to	application	in scheme	application	
	this parcel in	rate?	year	rate?	
	schem year		Yes or No		
	Yes or No				
AA/01234/56789	Yes	200 kg/ha	Yes	3 tonnes/ha	

Annex D List of arable crops to meet the requirements of crop diversification

Crop description	Crop code	Genus	Crop family
Alfalfa	ALF	medicago	Alfalfa
Arable Silage for Stock Feed	ASSF		Ensiled crop
Aromatic, Medicinal and Culinary Plants	AMCP		Aromatic, Medicinal and Culinary Plants
Artichokes	ARTC	cynara	Artichokes
Asparagus	ASPG	asparagus	Asparagus
Bedding and Pot Plants	BPP	,	Bedding & Pot Plants
Beetroot	BRT	beta vulgaris	Beet family
Birdsfoot Trefoil	BFT	lotus	Birdsfoot Trefoil
Brussels Sprouts	BSP	brassica oleracea	Cabbage family
Buckwheat	BW	fagopyrum	Buckwheat
Bulbs/Flowers	BFLO	0 1 7	Bulbs/Flowers
Cabbages and Savoys	CABB	brassica oleracea	Cabbage family
Calabrese	CALA	brassica oleracea	Cabbage family
Canary Seed	CANS	phalaris	Canary Seed
Carrots	CARR	daucus	Carrots
Cauliflowers	CAUL	brassica oleracea	Cabbage family
Celery	CEL	apium	Celery
Chickpea	CHP	cicer	Chickpea
Chicory	CHIC	cichorium	Chicory
Clover	CLO	trifolium	Clover
Energy Beet	ENG_B	beta vulgaris	Beet family
Fallow	FALW		Fallow
Fallow land that has been fallow for over 5 years	FALW_5		Fallow
Fibre Flax	FFS	linum	Flax and linseed
Fodder Beet	OCS_B	beta vulgaris	Beet family
Forage Maize	MAIZ	zea	Forage Maize
Garlic	GAR	allium	Onion family
Green Cover Mixtures	GCM		Green Cover Mixtures
Hemp	HS	cannabis	Hemp
Kale and Cabbages for Stock Feed	OCS_K	brassica oleracea	Cabbage family
Leeks	LEEK	allium	Onion family
Lentil	LEN	lens	Lentil
Lettuce	LETT	lactuca	Lettuce
Linseed	LIN	linum	Flax and linseed
Millet	MIL	panicum	Millet
Mixed Brassica for Stock Feed	MBSF	brassica rapa	Turnip family
		brassica sinapis /	
Mustard	MU	juncea	Mustard
Onions	ONI	allium	Onion family
Other Soft Fruit	OSFRT		Other Soft Fruit
Other Vegetables	OVEG		Other Vegetables
Parsnips	PAR	pastinaca	Parsnips
Permanent Cover - for EFA Buffer/Field Margin	PC	n/a	n/a
Phacelia	PHA	baraginaceae	Phacelia

		phacelia	
Crop description	Crop code	Genus	Crop family
Pumpkin	PUM	cucurbita	Pumpkin
Rape for Stock Feed	RAST	brassica rapa	Turnip family
Rotational Grass Year 1	TGRS1		Temporary grass
Rotational Grass Year 2	TGRS2		Temporary grass
Rotational Grass Year 3	TGRS3		Temporary grass
Rotational Grass Year 4	TGRS4		Temporary grass
Rotational Grass Year 5	TGRS5		Temporary grass
Seed Potatoes	SPOT	solanum	Potato family
			Spring oilseed &
Shopping Swedes	SWS	brassica napus	swedes
Shopping Turnips	STS	brassica rapa	Turnip family
Sorghum	SOR	sorghum	Sorghum
Spring Barley	SB	hordeum	Spring Barley
Spring Beans for human consumption	SBEAN	vicia	Spring beans & vetch
Spring Field Beans	SFB	vicia	Spring beans & vetch
Spring Oats	SO	avena	Spring Oats
1 3			Spring oilseed &
Spring Oilseed Rape	SOSR	brassica napus	swedes
Spring Peas for human consumption	SPEAS	pisum	Spring peas
Spring Protein Peas	SPP	pisum	Spring peas
Spring Rye	SRYE	secale	Spring Rye
Spring Triticale	STRIT	triticosecale	Spring Triticale
Spring Wheat	SW	triticum	Spring Wheat
Strawberries grown in the open	STRB_OPEN	fragaria	Strawberries
Strawberries polytunnels	STRB_POLY	fragaria	Strawberries
Sunflowers	SUN	helianthus	Sunflowers
Swedes for Stock Feed	SSF	brassica napus	Spring oilseed & swedes
Sweet Lupins	SL	lupinus	Sweet Lupins
Turf Production	TURF	Тарттао	Turf Production
Turnips for Stock Feed	TSF	brassica rapa	Turnip family
Tarripo for Glock Feed	101	brassica rapa	Uncropped Arable
Uncropped Arable Land	UCAA		Land
Vetch	VET	vicia	Spring beans & vetch
Ware Potatoes	WPOT	solanum	Potato family
Wild Bird Seed	WBS		Wild Bird Seed
Wild Flower Mix	WFM		Wild Flower Mix
Winter Barley	WB	hordeum	Winter Barley
Winter Beans for human consumption	WBEAN	vicia	Winter beans
Winter Field Beans	WFB	vicia	Winter beans
Winter Oats	WO	avena	Winter Oats
Winter Oilseed Rape	WOSR	brassica napus	Winter Oilseed Rape
Winter Peas for human consumption	WPEAS	pisum	Winter peas
Winter Protein Peas	WPP	pisum	Winter peas
Winter Rye	WRYE	secale	Winter Rye
Winter Triticale	WTRIT	triticosecale	Winter Triticale
Winter Wheat	WW	triticum	Winter Wheat

Annex E List of Permanent grassland options

Crop description	Crop code	Genus	Crop family
Permanent Grassland	PGRS	n/a	n/a
Rough Grazing	RGR	n/a	n/a
Open Woodland (Grazed)	WDG	n/a	n/a

Annex F List of Permanent crops

Crop description	Crop code	Genus	Crop family
Bilberries	BLB	vaccinium	
Blackberries	BKB	rubus	
Blackcurrants grown in the open	BLR_OPEN	ribes	
Blackcurrants polytunnels	BLR_POLY	ribes	
Blueberries grown in the open	BLU_OPEN	vaccinium	
Blueberries polytunnels	BLU_POLY	vaccinium	
Cranberries	CRB	vaccinium	
Ex-Structural Set-Aside	EX_SS		Ex-Structural Set-Aside
Gooseberries	GSB	ribes	
Loganberries	LGB	rubus	
Miscanthus	MSC	miscanthus	
Mulberries	MLB	morus	
New Woodland and Forestry - Arable	NETR_A		
New Woodland and Forestry - Non Arable	NETR_NA		
Nursery - Fruit Stock	NU_FS		
Nursery - Ornamental Trees	NU_OT		
Nursery - Roses and Rose Stock	NU_RRS		
Nursery - Shrubs	NU_SH		
Other Nursery Stock	ONU		
Raspberries grown in the open	RASP_OPEN	rubus	
Raspberries polytunnels	RASP_POLY	rubus	
Rhubarb	RHB	rheum	
Redcurrants	RRC	ribes	
Short Rotation Coppice	SRC		
Top Fruit	TFRT		
White Currants	WRC	ribes	

Annex G
List of Leguminous crops for calculating Greening requirements

Crop description	Crop code	Genus	Crop family
Alfalfa	ALF	medicago	Alfalfa
Chickpea	CHP	cicer	Chickpea
Lentil	LEN	lens	Lentil
Sweet Lupins	SL	lupinus	Sweet Lupins
Spring Beans for human consumption	SBEAN	vicia	Spring beans & vetch
Spring Field Beans	SFB	vicia	Spring beans & vetch
Spring Peas for human consumption	SPEAS	pisum	Spring peas
Spring Protein Peas	SPP	pisum	Spring peas
Winter Beans for human consumption	WBEAN	vicia	Winter beans
Winter Field Beans	WFB	vicia	Winter beans
Winter Peas for human consumption	WPEAS	pisum	Winter peas
Winter Protein Peas	WPP	pisum	Winter peas

Annex H List of Herbaceous forage crops for calculating Greening requirements

Crop description	Crop code	Genus	Crop family
Birdsfoot Trefoil	BFT	lotus	Birdsfoot Trefoil
Chicory	CHIC	cichorium	Chicory
Clover	CLO	trifolium	Clover
Vetch	VET	vicia	Spring beans & vetch

Annex I List of Fallow options for calculating Greening requirements

Crop description	Crop code	Genus	Crop family
Fallow	FALW	n/a	Fallow
Fallow land that has been fallow for over 5 years	FALW_5	n/a	Fallow
Uncropped Arable Land	UCAA	n/a	Uncropped Arable Land

Annex J - Ecological Focus Area Map

You must submit a map with your Single Application Form detailing the location and size of your managed EFA areas. Full guidance can be found when clicking on the question mark icon in the 'View only maps' when you are logged in to Rural Payments and Services.

How to create the example EFA map via 'View only maps'



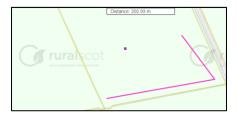


Selecting the Draw icon will open a Edit toolbar and this will allow you to mark up lines, areas and make notes on the map. This is a useful aid to allow you to measure EFA areas on your map

Measure length (metres)



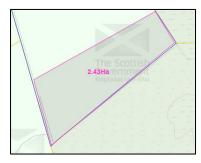
Selecting this icon allows you to measure continuous lines.



Measure Area (hectares)



Selecting this icon allows you to measure an area.



Text



Selecting this icon allows you to add text to the screen. On selecting this, a text box will appear

Your notes regarding EFA areas should include the following:

LPID

- EFA option name
- Area
- Width
- Length

You only need to include the field(s) with EFA options on them to meet your EFA map requirement.

If you have several parcels with EFA options on them, you can create individual maps if the parcels are some distance apart. This will allow for more detailed and clearer maps.

Once your EFA map is complete either print out two copies – keep one copy and post the other to your local RPID area office - or click 'Save to File' and save as a PDF file and email it in as supporting information.

Example of EFA map created in View only maps'

