









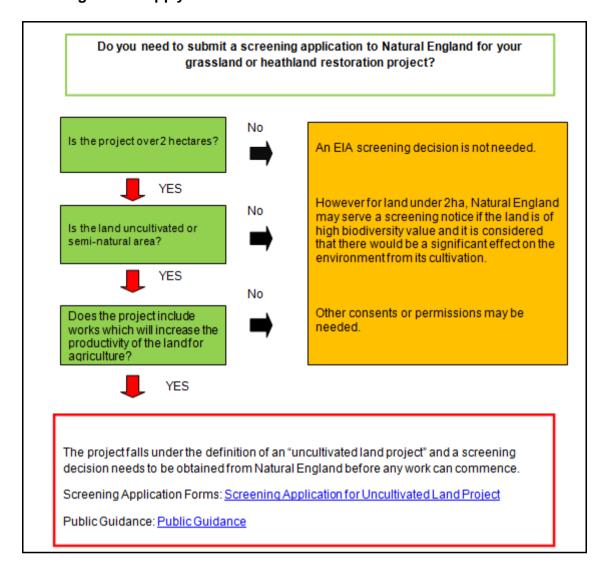
Advisory note covering restoration projects on grassland and heathland and the EIA (Agricultural) Regulations

This advisory note sets out the relationship between restoration projects on both grassland and heathland sites and the EIA (Agricultural) Regulations. It provides examples of the primary activities which are undertaken during restoration projects and provides advice as to where they sit within the screening application set out in the Regulations. The note is designed to be used by those people undertaking the restoration projects and Natural England advisors who are responsible for undertaking the necessary screening decisions.

Background to the Regulations

The Environmental Impact Assessment (Agriculture) (England) (No.2) Regulations 2006 ("the Regulations") came into force on 10 October 2006. Natural England implements the Regulations on behalf of Defra who are the policy owners and they only apply in England. The purpose is to protect environmentally significant priority and semi-natural habitats from agricultural intensification. The Regulations also cover the possible negative environmental effects from the physical restructuring of rural land holdings, such as changes to field boundaries or the addition, removal or redistribution of large amounts of material across the site.

When do the Regulations apply?



As described above, <u>all</u> criteria need to be met for a proposal to fall under the Regulations.

Projects for restoring grassland and heathland

Type of Project

There are two types of project covered by the EIA Regulations:

- Uncultivated Land Project (ULP) which is defined in the Regulations as "a project to increase the productivity for agriculture of uncultivated land or semi-natural area, and includes projects to increase the productivity for agriculture of such land to below the norm".
- Restructuring project (RP) which is defined as "a project for the restructuring of rural land holdings".

Under the Regulations, land is considered to be uncultivated if no chemical or physical cultivation activity has taken place for a period of fifteen years or more. The definition of cultivation under the Regulations includes but is not restricted to the following;

- Physical cultivation is considered to be agricultural soil-disrupting activities such as ploughing, some forms of tine harrowing, sub-surface harrowing, discing and rotovating.
- Chemical cultivation is considered to be the enhancement of the soil through the addition of increased levels of organic and inorganic fertilizers and soil improvers including lime. The clearance of existing vegetation from land with herbicides is also likely to be considered to be an "uncultivated land project" which would require a screening application.

Definitions for different types of grassland projects

The definitions below highlight the differences between restoration projects and creation projects in relation to the Regulations:

Restoration, particularly when referred to semi-natural grasslands is the process of restoring grasslands that were species-rich in the past, but have suffered from management neglect or have been agriculturally improved. Grasslands that are suitable for this option may still have some diversity of grasses and flowers and management may include seed introduction by an agreed method – such as spreading species-rich green hay from a suitable nearby site. The processes involved in undertaking reseeding sometimes require forms of 'cultivation' and a screening may be required. However, if it can be clearly audited that all works are not increasing the productivity of the land for agriculture (see below) than a screening decision will not be necessary.

Creation of semi-natural grasslands includes creating species-rich grassland on former arable land, ley grassland or set-aside. It is unlikely that a screening will be required on this land as it is unlikely to be a semi-natural habitat, unless set-aside has diversified to the extent that it contains species that one may find in semi-natural habitat, in which case a screening may be required.

Low-level cultivation not considered to affect the semi-natural nature of the land

- Some physical cultivation techniques may only disrupt the top surface of the soil, and do not
 cause the same increase in agricultural productivity as other techniques. They may be
 undertaken as routine or on-going management for semi-natural areas. For example, spring tineharrowing and chain-harrowing would be considered low-level cultivation and would not affect the
 semi-natural nature of the land.
- Chemical cultivation may be traditionally undertaken at low levels to replace nutrients lost through management without increasing production. Once again these would not cause the land to be considered cultivated. For example, infrequent applications of lime or low level applications of FYM to a hay meadow to replace nutrients eg 4 – 6 tonnes/ha/yr would not cause the seminatural nature of the land to change.

As projects for restoring grasslands and heathlands are likely to cover a wide range of sites there is likely to be a range of reasons for a screening decision as set out below:

- Land that has not been cultivated for a 15 year period will need a screening decision for an Uncultivated Land Project unless it can be clearly shown that the proposal will NOT increase the productivity of the land for agriculture (see below).
- Land that has been cultivated in the past 15 years but is a semi-natural area (see below) will
 need a screening decision unless it can be clearly shown that the proposal will NOT increase the
 productivity of the land for agriculture.
- If the land has been cultivated in the previous 15 years and is not a semi-natural area then no screening application is required

Semi-natural areas

Semi-natural areas are species-rich priority habitats and semi-natural habitats. This does not include agriculturally improved grasslands, such as grass and legume leys that have been present for over 5 years (as per the Permanent Pasture description under Basic Payment Scheme of the Common Agricultural Policy, National Vegetation Classification MG7, and grasslands that have been improved in the past, such as <u>some</u> of those that fall within MG6). Grasslands in the process of being recreated are likely to be in transition from a non-priority habitat starting point and are therefore, unlikely to come under the semi-natural area definition, as set out in the <u>Natural England Technical Information Note 110</u>¹. However, when restoring grasslands there may be some positive indicator species present suggesting that the habitat could lie on the edge of being considered semi-natural habitat, and other types of semi-natural habitats may be present, such as scrub or bracken, which would be impacted by the work. A screening application should be submitted if the work will impact these habitats

The Biodiversity Broad Habitat Classification devised by the Joint Nature Conservation Committee in 2000 and set out in <u>JNCC Report 307</u>² is used as a guide to ascertain a semi-natural area. The majority of which are set out in the table below:

Natural England (2012) Assessing whether created or restored grassland is a BAP Priority Habitat, Natural England Technical Information Note TIN110

² Jackson D.L., (2000), Guidance on the interpretation of the Biodiversity Broad Habitat Classification (terrestrial and freshwater types): Definitions and the relationship with other classifications, JNCC Report 307.

Semi-natural Area	Definition
Bracken	Areas with a continuous canopy of bracken at the height of the growing season. Does not include areas with scattered patches of bracken <0.25 ha, in the habitat where the bracken is growing.
Lowland heathland	Dry and wet heath habitats. Dwarf shrubs include heather, heath species, crowberry and dwarf gorse.
Upland dwarf shrub heath and moorland	Dry heather moorland and wet heath, blanket bog, raised mires, upland fens, swamps and limestone pavements. Dwarf shrubs include heather, heath species, crowberry and dwarf gorse.
Montane habitats	Vegetation above the tree line. (ie over 600 m above sea-level)
Inland rock	Naturally and artificially exposed rock > 0.25 ha, such as inland cliffs, caves, scree, limestone pavements and mineral spoil or waste tips.
Fens, Mires and Swamps	Wetlands on groundwater-fed permanently or periodically waterlogged peats or mineral soils. Includes fens, valley mires, lowland raised mires, ponds and reedbeds, purple moor grass and rush pastures including Culm grassland (the last is also acidic grassland).
Coastal & floodplain grazing marsh	Long term grassland within river or coastal floodplains with wet or waterlogged soils in spring, and seasonal 'splash' conditions. The land may have received annual or periodic addition of organic manures or low levels of organic fertiliser.
Lowland species-rich hay meadows	Habitat dominated by grasses and herbs on a range of soils and pH. Includes enclosed dry hay meadows and flood meadows. Land that may have received annual or periodically added organic manures or low levels of inorganic fertilisers is also included.
Upland species-rich hay meadows	Characterised by vegetation dominated by grasses and herbs on a range of soils and pH. Includes enclosed dry hay meadows. Land that may have received annual or periodically added organic manures or low levels of inorganic fertilisers is also included.
Unimproved acid grassland	Grassland on very dry acid soils in the lowlands or damp acidic grasslands on gleys or shallow peats elsewhere. Includes all moorland where heather has been grazed out, and Calaminarian (heavy metal rich) grasslands.
Unimproved neutral grassland	Grasses and herbs on a range of neutral soils. All types are considered semi- natural, except semi-improved grasslands (NVC type MG6) which have been modified by the addition of inorganic fertiliser in the last 15 years.
Unimproved calcareous grassland	Grassland with characteristic lime-loving species found on well drained soils rich in chalk, limestone or other bases.
Scrub	Self-seeded wild shrubs and trees - usually less than 5 metres in height. The woody species form a canopy cover of greater than 30% and have a patch size greater than 0.25ha. Juniper scrub is included.
Certain coastal habitats	Maritime cliffs and slopes, saltmarsh, sand-dunes & associated habitats and vegetated shingle.
Standing water and canals	includes natural lakes, meres and pools, as well as man-made waters such as reservoirs, canals, ponds and gravel pits including open water zone and water fringe vegetation. Ditches with open water for at least the majority of the year are also included.

Increase in the productivity of the land for agriculture

One of the other factors which has to be considered under the Regulations is whether a project increases the productivity of the land for agriculture; this includes an increase to that which is below the norm for the area. The following activities are likely to be judged as increasing the productivity of the land for agriculture;

- applying increased levels of fertiliser or soil improvers, such as lime;
- sowing seed which would increase the productivity of the land for agriculture, such as agricultural
 varieties of perennial rye-grass, timothy and white clover which are bred specifically to increase
 grassland productivity;
- physically cultivating the soil by, for example, ploughing, some forms of tine harrowing which disrupt the surface of the soil, rotovating;
- draining land; and
- clearing existing vegetation either physically or using herbicides.

For reference, the methods which are generally used for the restoration of grassland or heathland and their relationship to the Regulations and the increase in productivity of the land for agriculture are set out below:

Grazing and/or cutting

No screening application is needed for commencement of cutting activities but if the proposal is to introduce grazing on uncultivated land and the annual stocking rates exceed the rates provided below. particularly if supplementary feed is going to be used, a screening application should be submitted.

- Non LFA grassland 2 LU/ha
- LFA Grassland 1.6 LU/ha
- Enclosed rough grazing 1 LU/ha
- Semi-natural rough grazing 0.6 LU/ha
- Semi-natural rough grazing (heather)/Lowland heath 0.4 LU/ha
- Above moorland line 0.4 LU/ha

<u>Seed Introduction</u>
The addition of wildflower seeds during semi-natural habitats restoration projects, through green hay, brush-harvested seed, wildflower seed mixture, or heather brash from a donor site, will have no impact on the soil and therefore, no screening application needs to be submitted. Seed should come from a diverse source and may contain species that are also used in agriculture, such as perennial rye grass and white clover, but should not be of low diversity with solely more agricultural species.

Bare ground creation

If a clear audit trail can be provided to indicate that all the activities undertaken through this process have not increased the productivity of the land for agriculture, primarily as the aim is to strip soil nutrients or create niches for the establishment of wildflower species or as wildlife habitat, then a screening application does not need to be submitted.

Clearance of scrub

Scrub is defined as a semi-natural area under the Regulations, as shown in the table provided above and therefore, if the creation project includes clearance of scrub over an area in excess of 2 hectares a screening application needs to be submitted. In terms of increasing the productivity of the land for agriculture, the act of clearing scrub areas which will then be re-colonized by grassland or heathland is judged to be an increase in the usable area for agricultural purposes and therefore, an increase in productivity.

Clearance of non-native invasive species

Although clearance of existing vegetation is included in the activities which may require a screening decision, provided there is clear audit trail that the work only covers non-native invasive species, no screening application will be needed.

Longer term Considerations

It is important to note that land that has been in an agri-environment scheme for habitat reversion or creation options will not fall under the Regulations until it has been uncultivated for the period of 15 years regardless of the quality of the habitat that has been created before that 15 year deadline. However, where an agri-environment scheme includes management options to maintain or restore land which is a semi-natural area at the start of the agreement, any non-invasive management stipulated within the agreement, such as annual FYM applications or spring tine-harrowing would be considered to be 'low-level cultivation' as described above and the land would fall under the Regulations.