



DEPARTMENT OF AGRICULTURE FOOD AND THE MARINE

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***RELEASED GLAS SPECIFICATION:***

***23<sup>rd</sup> February 2015***

***Revised 14/09/2020***



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## Introduction

**As extended in accordance with Article 28 of Council Regulation (EU) No. 1305/2013, this GLAS specification overrides all previous draft specifications and any answers to queries by the Department either verbal or written given to date regarding the GLAS Scheme.**

- All actions (excluding bat, bird and bee boxes) must be selected on LPIS parcels with a utilisable agricultural area (UAA). The only exception is for Commonage which will be paid on the GLAS Commonage Area.
- All area based actions are paid on the digitised/ref/mea eligible area.
- Participants must ensure they have control of the lands for the duration of the GLAS contract whether owned, leased or rented. Advisors / farmers must ensure that the area, feature and/or linear units entered for payment in GLAS are suitable for the action to be carried out
- Arable parcel actions must be delivered on parcels declared as 'arable' on the SPS/BPS application.
- If you intend to split a LPIS parcel by digitisation, unless there is a physical stockproof boundary on the ground, a fence must be put in place by the commencement date of the GLAS contract.
- Land drainage or reclamation work is not allowed on parcels selected for area based actions. However, if existing drains become blocked they may be repaired with as minimum disturbance as possible to the LPIS parcel.
- Catch Crops sown for the purpose of fulfilling greening equivalence criteria under Pillar I of CAP are eligible for a reduced GLAS payment.
- The burning of stubble is not permitted on LPIS parcels chosen for tillage based actions.
- For a fence to be considered stock proof and fit for purpose, it must consist of permanent stakes and wire appropriate for the livestock type.
- **Receipts for work carried out must be retained for the duration of the extension period and for three months after the end of the contract.**
- **Records must be maintained annually for the duration of the contract and for three months after the end of the GLAS contract. As above**
- Where LPIS parcels of Low Input Permanent Pasture and Traditional Hay Meadow are situated within designated Natura 2000 site, farmers may choose to forgo the Natura payment and receive the LIPP or THM payment under GLAS once the parcel(s) comply with the Low Input Permanent Pasture and/or Traditional Hay Meadow specification.
- Entrants in the Organic Farming Scheme should refer to appendix 2 for eligible GLAS actions.
- Phosphorus is permitted to be applied on area based actions in line with the requirements of SI 31/2014 (SI 605/2017) (SI 65/2018) (SI 40/2020)
- Where more than 1 margin type is taken on the same LPIS parcel, they cannot overlap on each other.
- Other than the protection of monuments action, no other GLAS actions can be delivered on the site of a National Monument.

- GLAS participants should comply with the Campaign for Responsible Rodenticide Use Code (CRRU) in their daily farming activities - see Appendix 7.
- Where farmers have designated lands, they must ensure they comply with the Activities Requiring Consent – see appendix 13.
- Lakes are not eligible watercourses for the Protection of Watercourses from Bovines action and for the Riparian Margin action.
- Where the application of fertiliser restrictions under certain compulsory Tier 1 Farmland Bird Actions threatens farm viability, or could lead to hardship due to inability to produce sufficient fodder for livestock, applicants may remove up to 20% of the GLAS-identified area from payment. Entire parcels can be removed, or existing parcels may be split to reserve areas for fodder production or other farm use. These areas will NOT receive payment for the relevant Bird action and no other GLAS action may be selected on them. The species concerned are Twite A, Chough, Corncrake, Hen Harrier and Breeding Waders.

#### Extension period

**During the extension period, all specifications outlined in the “ Green, Low-carbon, Agri-environment Scheme (GLAS) Specification for Tranche 1 Participants and any/all related circulars, must be adhered to in full, including maintaining/repairing/replacing as appropriate and continuing management practices and rotations as set out in said documents for the duration of the extension period.**

**Records must be maintained annually for the duration of the extended contract period and for three months after the end of the GLAS contract.**

**Abbreviations:**

ARC: Activity Requiring Consent

GA: General Action

GAEC: Good Agricultural and Environmental Condition

CMP: Commonage Management Plan

HSWS: High Status Water Sites

LIPP: Low Input Permanent Pasture

LPIS: Land Parcel Identification System

NPWS: National Parks and Wildlife Service

PA: Priority Action

PP: Part Parcel i.e. only part of the parcel is committed to the GLAS action

SMP: Sustainable Management Plan

SPS: Single Payment Scheme

THM: Traditional Hay Meadow

UAA: Utilisable Agricultural Area

VSWS: Vulnerable Status Water Sites

WP: Whole Parcel i.e. the whole parcel is committed to the GLAS action

Actions: Minimum/ Maximum Units, Completion deadlines and Payment Rate

| Action   |                   | Minimum  | Maximum Payable Units in GLAS | Completion deadline                                   | Payment Rate              |
|--|-------------------|--|-------------------------------|---|---------------------------|
| Arable grass margin                                  | a) 3 metre width  |  | 7,000m                        | All tillage crops harvested in 2016                   | €0.35/m/yr                |
|  | b) 4 metre width  |  | 5,000m                        |   | €0.50/m/yr                |
|  | c) 6 metre width  |  | 3,500m                        |   | €0.70/m/yr                |
| Bat Box  |                   | 3 boxes  | 15 boxes                      | 31 <sup>st</sup> March 2016                           | €13/box/yr                |
| Bird Box   |                   | 1 box  | 15 boxes                      | 31 <sup>st</sup> March 2016                           | €6/box/yr                 |
| Conservation of Solitary Bees (Boxes)                |                   | 1 box  | 5 boxes                       | 31 <sup>st</sup> March 2016                           | €6/box/yr                 |
| Conservation of Solitary Bees (Sand)                 |                   | 1 habitat  | 2 habitats                    | 31 <sup>st</sup> March 2016                           | €45/habitat/yr            |
| 1. Breeding Waders                                   |                   |  | *                             |   | €366/ha/yr                |
| 2. Chough  |                   |  | *                             |   | €365/ha/yr                |
| 3. Corncrake   |                   |  | *                             |   | €364/ha/yr                |
| 4. Geese and Swans                                   |                   |  | *                             |   | €205/ha/yr                |
| 5. Grey Partridge                                    |                   | 200m   | *                             | 31 <sup>st</sup> May 2016                             | €2.10/m/yr                |
| 6. Hen Harrier                                       |                   |  | *                             |   | €370/ha/yr                |
| 7. Twite A   |                   |  | *                             |   | €375/ha/yr                |
| Twite B  |                   | 50m  | *                             | 31 <sup>st</sup> May 2016                             | €1.50/m/yr                |
| Twite C  |                   | 0.25ha   | 3ha                           | 31 <sup>st</sup> May 2016                             | €900/ha/yr                |
| Catch Crops  |                   | 10 ha (Priority Area) / 4 ha (General Action)      | 32 ha                         | 15 <sup>th</sup> September following approval.        | €155/ha/yr                |
| Commonage Management Plan                            |                   |  | *                             |   | €120/ha/yr                |
| Coppicing of Hedgerows                               |                   | 10m  | 1,000m                        | 28 <sup>th</sup> February 2017                        | €2.20/m/yr                |
| Environmental Management of Fallow Land              |                   | 0.25ha   | 3 ha                          | 31 <sup>st</sup> May 2016                             | €750/ha/yr                |
| Farmland Habitat (Private Natura)                    |                   |  | *                             |   | €79/ha/yr                 |
| Laying of Hedgerows                                  |                   | 10m  | 1,000m                        | 28 <sup>th</sup> February 2017                        | €3.70/m/yr                |
| Low Emission Slurry Spreading                        |                   |  | *                             |   | €1.20/m <sup>3</sup> /yr  |
| Low Input Permanent Pasture / Traditional Hay Meadow |                   |  | 10 ha                         |   | €314/ha/yr and €315/ha/yr |
| Minimum Tillage                                      |                   | 10 ha (Priority Area) / 4 ha (General Action)      | *                             | 1 <sup>st</sup> crop establishment following approval | €40/ha/yr                 |
| Planting a Grove of Native Trees                     |                   | 0.05ha / 250 plants                                | 0.09 ha / 450 plants          | 31 <sup>st</sup> March 2016                           | €0.90/plant/yr            |
| Planting New Hedgerow                                |                   | 10m <sup>1</sup>                                   | 200m                          | 31 <sup>st</sup> March 2016                           | €5/m/y                    |
| Protection and Maintenance of Monuments              | a) Tillage        | 1  | 20                            | 31 <sup>st</sup> May 2016                             | €146/unit/yr              |
|  | b) Grassland      | 1  |                               | 28 <sup>th</sup> February 2017                        | €120/unit/yr              |
| Protection of Water Courses from Bovines             |                   |  | *                             | 31 <sup>st</sup> December 2015                        | €1.50/m/yr                |
| Rare Breeds  |                   | 0.15 LU  | 10 LU                         |   | €200/unit/yr              |
| Riparian Margin                                      | a) 3 metre width  |  | *                             | 31 <sup>st</sup> March 2016                           | €0.90/m/yr                |
|  | b) 6 metre width  |  | *                             | 31 <sup>st</sup> March 2016                           | €1.20/m/yr                |
|  | c) 10 metre width |  | *                             | 31 <sup>st</sup> March 2016                           | €1.60/m/yr                |
|  | d) 30 metre width |  | *                             | 31 <sup>st</sup> March 2016                           | €3.60/m/yr                |
| Traditional Dry Stone Wall Maintenance               |                   | 10m  | 4,000m                        |   | €0.70/m/yr                |
| Traditional Orchards                                 |                   | 0.05ha /10 trees                                   | 0.05ha /10 trees              | 31 <sup>st</sup> March 2016                           | €23.50/unit/yr            |
| Wild Bird Cover                                      |                   | 0.25ha (General Action)<br>1.0ha (Priority Action) | 3 ha                          | 31 <sup>st</sup> May annually                         | €900/ha/yr                |

\* = Overall maximum payment is €5,000 or €7,000 per GLAS participant per year

<sup>1</sup>Must be in a single continuous length yr = year, m = metre, ha = hectare and m<sup>3</sup>= cubic metre

## Arable Grass Margins

### Objective:

To provide a habitat for flora and fauna, increase biodiversity and help protect water quality.

### Background:

The establishment of an arable grass margin along the full length of an existing field or LPIS parcel boundary will increase the diversity on the farm. Where established along a watercourse it acts as a buffer zone to intercept sediment and nutrients.

Notes: The parcels selected for this action must remain declared as **arable** for the duration of the GLAS contract and the Arable Grass Margin must also remain in the same location for the duration of the GLAS Contract.

Where the margin is established along a watercourse, an additional 2 metre unsown (with an arable crop) and unfertilised margin must be in place between the watercourse and the arable grass margin.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (boxes/sand), Grey Partridge, Coppicing of Hedgerows, Laying of Hedgerows, Low Emission Slurry Spreading, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|           |  |
|-----------|--|
| <b>1.</b> | Establish a 3, 4 or 6 metre grass margin along the full length of a LPIS parcel or field boundary. The Arable Grass Margin must be established on all selected tillage parcels on which a tillage crop will be harvested in 2016.  |
| <b>2.</b> | The location and length (metres) must be identified on the LPIS parcel(s) and marked on the map submitted. The margin(s) must remain in the same location for the duration of the contract. Participants can choose different Arable Grass Margin widths within the same LPIS parcels, but only on different/separate field/LPIS boundaries. |
| <b>3.</b> | Sow a grass seed mix containing at least 60% Cocksfoot or Timothy or a combination of  |

|    |   |
|----|---|
|    | these. Grass seed labels and receipts should be kept for the duration of the GLAS contract.   |
| 4. | Soil cultivation cannot be carried out within the margin once established.  |
| 5. | The margin must be mulched, mown or grazed at least once per year, but not between the 1st March and the 15 <sup>th</sup> August. Off takes can be removed. |
| 6. | Fertiliser or lime cannot be applied to the margin.   |
| 7. | Pesticides cannot be applied to the margin except for the spot treatment of noxious and/or invasive weeds.  |
| 8. | <b>Continue the requirements as listed above for extension period.</b>  |

## Bat Boxes

### Objectives:

To improve biodiversity in the farming landscape and replace habitats lost through changes in farming practice. Bats also play an important role in farm pest management as they feed on midges, flies and other potential pest species.

### Background:

This action is to help to replace natural roost locations for bats that have been removed through the changes in farming practice. It will help to conserve some of the nine bat species found in Ireland. All Irish bat species are protected by the 1976 Wildlife Act and 2000 amendment and the EU Habitats Directive.

Bat boxes are most likely to be used if located in areas where bats feed. Bats in particular favour hedgerows and treelines as navigation routeways and feeding sites. Areas where bats can be spotted zipping around in the evenings are suitable sites to locate a bat roost box.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Arable Grass Margins, Bird Boxes, Conservation of Solitary Bees (Boxes/sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese & Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Catch Crop WP, Coppicing of Hedgerows, Environmental Management of Fallow Land WP, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP, Traditional Orchards and Wild Bird Cover WP.**

### Requirements:

|    |   |
|----|---|
| 1. | Install new bat roost boxes with 3 boxes per tree or 3 boxes per post or 3 boxes per building. The 3 boxes in each location must face in different directions. Bat Roost Boxes must be in place by 31 <sup>st</sup> March 2016. |
| 2. | The maximum number of Bat boxes is 15, in groups of three boxes per tree or per post or per farm building.  |
| 3. | The location must be clearly marked on the map and must be maintained in the same   |

|    |   |
|----|---|
|    | position for the duration of the contract. Once the box is installed, a marking must be put on the tree or post to identify it for inspection purposes. |
| 4. | Box(es) can be made from wood or woodcrete and must be draught free.  |
| 5  | <b>Repair/ replace boxes if required during the extension period.</b>   |
| 6  | <b>Continue the requirements as listed above for extension period.</b>  |

**Recommendations:**

It is recommended that bat boxes are placed a minimum of 4 metres off the ground and an area of 1m radius around the Roost Box must be clear of obstacles such as no ivy and/or branches. It is also recommended that boxes are not placed in a lit up area of the farmyard or adjacent to lighting. Bat boxes should ideally be place close to hedgerows or areas of scrub where bats will hunt.

**Further information:**

<http://www.batconservationireland.org>

<http://www.batroostireland.org>

<http://www.highwoodsvolunteers.org.uk>

For diagrams and measurements of a bat box - see **Appendix 8.**

## Bird Boxes

### Objectives:

To improve biodiversity in the farming landscape and replace habitats lost through changes in farming practice.

### Background:

This action is to help to replace natural habitats for birds that have been removed through changes in farming practice. As a result of changes to our countryside, several bird species have come to rely on farm buildings and other structures for nesting habitats.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Arable Grass Margins, Bat Boxes, Conservation of Solitary Bees (Boxes/sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese & Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Catch Crops WP, Coppicing Hedgerows, Environmental Management of Fallow Land WP, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP, Traditional Orchards and Wild Bird Cover WP.**

### Requirements:

|    |  |
|----|--|
| 1. | Install a new Bird Box(es) by the 31 <sup>st</sup> March 2016.   |
| 2. | A minimum of 1 Bird Box and a maximum of 15 Bird Boxes.  |
| 3. | Place a maximum of 1 Bird Box per tree or post or on the external wall of a farm building.   |
| 4. | The location(s) must be clearly marked on the map and must be maintained in the same position for the duration of the contract. Once the box is installed, a marking must be put on the tree or post to identify it for inspection purposes. |
| 5. | Box(es) can be made from wood or woodcrete and must be draught free.   |
| 6. | <b>Repair/ replace boxes if required during the extension period.</b>  |
| 7. | <b>Continue the requirements as listed above for extension period.</b>   |

**Recommendations:**

It is recommended that old nest material is cleaned out annually to prevent carryover of parasites from one nesting season to the next, ideally in February. Bird Boxes should be placed at least 2.5 metres off the ground.

Entrance of the box must face North or North East. Bird Boxes should be tilted slightly forward to allow moisture to drain out.

**Further information:**

For Diagrams and measurements of a Bird Box – see **Appendix 9**. Also see

<http://www.teagasc.ie/publications/2008/20080417/nestboxes.pdf> and

<http://www.birdwatchireland.ie/Default.aspx?tabid=270> for further details.

Note: Cross compensation between Bird Boxes and Bat Roost Boxes is not allowed i.e. if you apply to deliver 5 Bird Boxes and 5 Bat Roost Boxes, you must deliver 5 of each to be paid for all ten i.e. you cannot deliver 8 of one and 2 of the other. The same applies to the Bee Box action.

## Conservation of Solitary Bees (Boxes)

### Objective:

To improve biodiversity in the farming landscape and replace habitats lost through changes in farming practice.

### Background:

Of the 101 bee species in Ireland, 80 species are solitary bees. Solitary bees look very different from bumblebees. They are much smaller and occur in a range of different sizes and colours. Irish solitary species nest in various different ways. Leafcutter solitary bees nest in hollowed out twigs or bamboo canes. Solitary bees are useful in the pollination of crops as well as having wider biodiversity benefits.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Arable Grass Margins, Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Sand), Farmland Birds – Breeding Waders, Cough, Corncrake, Geese and Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Catch Crops WP, Coppicing of Hedgerows, Environmental Management of Fallow Land WP, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP, Traditional Orchards and Wild Bird Cover WP.**

### Requirements:

|    |   |
|----|---|
| 1. | Install a new bee box(es) by the 31 <sup>st</sup> March 2016 – see appendix 10.   |
| 2. | A minimum of 1 Bee box and a maximum of 5 Bee boxes.  |
| 3. | The location must be clearly marked on the map and must be maintained in the same position for the duration of the contract.  |
| 4. | Box(es) must be made from wood and must be draught free.  |
| 5. | Place box(es) on a tree/post. Once the box is installed, a marking must be put on the tree/post to identify it for inspection purposes. Only one bee box should be placed on each tree or post. |

|    |  |
|----|--|
| 6. | Box(es) must be protected from livestock.                              |
| 7. | <b>Repair/ replace boxes if required during the extension period.</b>  |
| 8. | <b>Continue the requirements as listed above for extension period.</b> |

**Recommendations:** It is recommended that the bee box should be placed in close proximity of flowering plants that flower annually from May to September. Bee Boxes should be placed a minimum of 40 cm off the ground, in a sunny location, sheltered from wind and protected from the rain.

**Further information:**

<http://www.foxleas.com/beehouse.htm>

For Diagrams and measurements of a bee box - see **Appendix 10**.

## Conservation of Solitary Bees (Sand)

### Objective:

To improve biodiversity in the farming landscape and replace habitats lost through changes in farming practice.

### If you select this action the only other actions you can select on this LPIS parcel are:

Arable Grass Margins, Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Boxes), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese and Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Catch Crops WP, Coppicing of Hedgerows, Environmental Management of Fallow Land WP, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP, Traditional Orchards and Wild Bird Cover WP.

### Requirements:

|    |  |
|----|--|
| 1. | Create a bee habitat by placing 1 tonne of builder's sand in a mound in the corner of a LPIS parcel or field and fence it from livestock by the 31 <sup>st</sup> March 2016. |
| 2. | A minimum of 1 Bee habitat and a maximum of 2 Bee habitats.  |
| 3. | The Bee Habitats cannot be placed side by side and must be individually fenced from livestock.   |
| 4. | The location must be clearly marked on the map and must be maintained in the same position for the duration of the contract.   |
| 5. | The Habitat(s) must be strimmed annually and throughout the GLAS contract to keep shading vegetation under control.  |
| 6. | Pesticides cannot be applied to the habitat.   |
| 7. | Receipts for the sand indicating the weight must be retained for the duration of the GLAS contract.  |
| 8. | <b>Continue the requirements as listed above for extension period.</b>   |

It is recommended that the bee habitat is positioned in a sunny location ideally south facing slopes and exposed to direct sunlight. You should avoid locations within 20 metres of a watercourse and/or on steep slope(s).

# Conservation of Farmland Birds

## 1. Breeding Waders

### Objective:

Maintain and increase the breeding success of breeding waders by halting habitat loss and enhancing habitat availability and suitability.

### Background:

National and regional numbers of Breeding Waders have suffered severe decline over recent years in particular Lapwing, Dunlin, Redshank, Golden Plover, Snipe and Curlew. This is due to a loss of habitat, especially due to the intensification of agriculture and afforestation of land. Without intervention the population is facing extinction. Breeding waders depend upon extensive farming systems, such as extensive grazing of upland commonages, lowland wet grasslands or machair grassland, to maintain habitats appropriately i.e. vegetation for nests and chick-feeding areas during the breeding season.

Note: Your advisor will advise you as to whether you have these LPIS parcels on your land when he/she is submitting your GLAS application for you online.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |  |
|----|--|
| 1. | Produce a sward cover by extensive grazing of parcels within the GLAS contract to allow for a mosaic of short, medium and tall vegetation cover to develop between 15 <sup>th</sup> March and 1 <sup>st</sup> July annually. |
| 2. | There must be a grazing enterprise of owned livestock on the holding.  |
| 3. | The action must be delivered on full LPIS parcel(s). The LPIS plots selected must be marked on the map submitted with the GLAS application.  |
| 4. | No machinery operations can be carried out between the 15th March and 15th July on   |

|    |  |
|----|--|
|    | parcels within the GLAS contract.  |
| 5. | Fertilisers and other chemicals are not permitted. Where noxious and/or invasive weeds are present, they must be controlled ideally by mechanical means; however, spot treatment using pesticides may be required in some circumstances. |
| 6. | Rushes, where present must be controlled annually, but not between 15th March and 15th July. The use of a weed wiper for control of rushes is permissible.   |
| 7. | No silage or hay can be cut from parcels within the GLAS contract  |
| 8. | No reseeding of these parcels is allowed.  |
| 9. | <b>Continue the requirements as listed above for extension period</b>  |

Note: Where the fencing of a watercourse for bovines was a priority action, but a derogation was approved by Johnstown Castle not to fence the watercourse on parcels with breeding waders, the participant remains eligible for GLAS, but will receive no payment for the fencing of watercourse action for the lengths concerned within the Derogation.

Where rushes are topped before the 15th March and/or after the 15th July, approximately 30% of the rush cover should be retained.

## 2. Chough

### Objective:

To maintain and enhance habitat areas for Chough and increase numbers of breeding Chough in targeted areas.

### Background:

The Chough is a member of the crow family, about the size of a jackdaw. They have an iridescent black plumage and a striking red curved beak and long red legs. They are largely coastal in distribution in Ireland with the maritime influence helping to maintain short swards which are optimal for access to the prey in the soil. They feed on insects and invertebrates that live in the soil, animal dung especially where the sward is short. A short sward is optimal. The Irish Chough population makes up about 60% of a geographically distinct and isolated NW European population of approximately 1,500 pairs.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |  |
|----|--|
| 1. | Produce a suitable sward by developing an appropriate grazing plan to maintain a tightly grazed short sward throughout the year on the areas within the GLAS contract.   |
| 2. | The action must be delivered on full LPIS parcel(s). The LPIS plots selected must be marked on the map submitted with the GLAS application.  |
| 3. | Rolling is not permitted between the 15 <sup>th</sup> March and the 15 <sup>th</sup> July annually.  |
| 4. | Where a parcel is cut for silage/hay, only 1 cut can be taken per year.  |
| 5. | Heather, bracken and scrub (ARCs – see appendix 13) where present must be controlled where appropriate and only between 1 <sup>st</sup> September and 28 <sup>th</sup> February annually.  |
| 6. | Maximum chemical nitrogen usage is 40 kg N per ha per annum on parcels within the GLAS contract.   |
| 7. | The use of Pesticides is not permitted. Where noxious and/or invasive weeds are present, they must be controlled preferably by mechanical means; however, spot treatment using pesticides may be required in some circumstances. |

**8.**

**Continue the requirements as listed above for extension period.**

### 3. Corncrake

#### Objective:

Create and maintain cover and nesting shelter for Corncrake birds when they arrive from Africa throughout their breeding season (April to September).

#### Background:

The Corncrakes once bred throughout Ireland but because of the intensification of agriculture their distribution and numbers declined. Corncrakes are now mainly found in County Donegal and parts of West Connaught, particularly the western seaboard of counties Mayo and Galway. Corncrakes require vegetation which is at least 20cm (8 inches) high for the breeding season.

#### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

#### Requirements:

|    |   |
|----|---|
| 1. | Produce a suitable cover of tall herbaceous vegetation when the meadow is closed off.   |
| 2. | The action must be delivered on full LPIS parcel(s). The LPIS plots selected must be marked on the map submitted with the GLAS application.   |
| 3. | Grazing, mowing, topping and/or other field operations requiring the use of machinery are not permitted from 15 <sup>th</sup> March to the 20 <sup>th</sup> August annually.  |
| 4. | The meadows must be mown annually, except when weather conditions make this impossible.   |
| 5. | Mowing must be carried out using the "centre-out" method. See Appendix 1a.  |
| 6. | Early cover areas must exist within the corncrake parcel and can be provided by creating or maintaining an area of tall herb vegetation (e.g. nettles, reed, cow parsley, iris but not trees or shrubs or other dense vegetation) in spring. These areas can also provide late cover following mowing in meadows. Provide at least 0.1 of a hectare for every 2 hectares of corncrake meadow. |
| 7. | The early cover areas may be cut or grazed after the 10 <sup>th</sup> September annually.   |

|     |  |
|-----|--|
| 8.  | Maximum chemical nitrogen usage is 30 kg N per ha per annum on parcels within the GLAS contract.   |
| 9.  | Rushes, where present must be controlled annually, but not between 15th March and 20th August annually. The use of a weed wiper for control of rushes is permissible.  |
| 10. | Where noxious and/or invasive weeds are present, they must be controlled preferably by mechanical means but not between 15th March and 20th August annually; however, spot treatment using pesticides may be required in some circumstances. |
| 11. | <b>Continue the requirements as listed above for extension period.</b>   |

### Recommendations

The mower must not exceed 3.6 metres in width and mowing should take place at low speed.

#### 4. Geese and Swans

##### Objective:

To promote the production of a grass sward to feed overwintering geese and swans including the Whooper Swan, Greenland White Front Goose, Barnacle Goose and Brent Goose.

##### Background:

Ireland hosts a significant proportion of the European populations of Geese and Swans. Many of which are Red and Amber listed. Without intervention, local populations face disturbance.

##### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bird Boxes, Bat Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

##### Requirements for Grassland Parcels:

|    |   |
|----|---|
| 1. | Produce a suitable grass sward.   |
| 2. | The action must be delivered on full LPIS parcel(s). The LPIS parcels selected must be marked on the map submitted with the GLAS application.   |
| 3. | The sward height varies depending on the target species on your land but it must be between 5 -12 cm in height on average, by the 1 <sup>st</sup> October annually.   |
| 4. | Close off parcels from livestock from the 1 <sup>st</sup> of October to the 30 <sup>th</sup> April of the following year, in each year of the contract.   |
| 5. | These parcels must be maintained in grass for the duration of the GLAS contract.  |
| 6. | Avoid disturbance of birds during periods of occupancy. Field operations requiring the use of tractor machinery should only be undertaken if necessary, during the period 1 <sup>st</sup> October to 30 <sup>th</sup> April annually. |
| 7. | <b>Continue the requirements as listed above for extension period.</b>  |

### Requirements for Tillage Parcels:

|    |   |
|----|---|
| 1. | Establish a winter cereal crop or a catch crop (in accordance with page 34 of this specification) by 15 <sup>th</sup> October annually. Where the participant opts for the catch crop option, it must remain in situ until the 15 <sup>th</sup> April annually. |
| 2. | The action must be delivered on full LPIS parcel(s). The LPIS parcels selected must be marked on the map submitted with the GLAS application.   |
| 3. | Avoid disturbance of birds during periods of occupancy. Field operations requiring the use of tractor machinery should only be undertaken if necessary, during the period 1 <sup>st</sup> November to 15 <sup>th</sup> April annually.                          |
| 4. | <b>Continue the requirements as listed above for extension period.</b>  |

Note: Where the fencing of watercourses from bovines was a priority action, and a derogation was approved by Johnstown Castle not to fence the watercourse on parcels with Geese and Swans, the participant will remain eligible for GLAS but will receive no payment for the fencing of watercourse action for the lengths concerned within the Derogation.

## 5. Grey Partridge

### Objective:

To promote and maintain suitable breeding and foraging habitats for the Grey Partridge.

### Background:

The Grey Partridge is a red listed bird of Conservation Concern in Ireland. The species has suffered a severe decline in numbers in recent years in Ireland. The last potentially sustainable wild population of Grey Partridge in Ireland is limited to Boora in West Offaly and to North Co. Dublin. The Department has selected a number of Priority areas with the assistance of NPWS, Birdwatch Ireland and the Irish Grey Partridge Conservation Trust. This action provides a grass and cereal based margin. The grass margin provides an appropriate nesting habitat and the mixed cereal margin creates a brood rearing habitat for Grey Partridge chicks.

Note: This action is mandatory for applicants with Grey Partridge approved LPIS parcel(s). Your advisor will be able to advise you as to whether you have eligible Grey Partridge LPIS parcels on your land. Where a participant also chooses arable grass margin in the same LPIS parcel as the Grey Partridge margin, the margins cannot overlap.

Natura 2000 designated lands or commonages are not eligible for this action.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Arable Grass Margin, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|           |  |
|-----------|--|
| <b>1.</b> | Successfully establish a 12 metre margin: 4 metre (grass) and 8 metre (Grey Partridge Mix) by 31 <sup>st</sup> May 2016. Where the GLAS participant is using a 3 metre drill, he/she must successfully establish a 3 metre (grass) and 9 metre (Grey Partridge Mix) margin by 31 <sup>st</sup> May 2016. |
| <b>2.</b> | Establish along a full length of an existing field or LPIS parcel boundary. The LPIS plots selected must be marked on the map submitted. The 4 metre (or 3 metre depending on  |

|     |  |
|-----|--|
|     | drill width) grass margin must be established from the edge of the field or LPIS parcel boundary with the 8 metre (or 9 metre depending on drill width) Grey Partridge Mix margin outside that. The margin cannot be grown in parallel 12 metre strips within a LPIS parcel or field.  |
| 3.  | The minimum length of margin that must be delivered at farm level is 200 metres.   |
| 4.  | The grass mix must consist of 70% Cocksfoot and 30% Timothy at the standard grass seed rate.   |
| 5.  | Grey Partridge Mix must consist of Triticale, Kale, Lucerne, perennial chicory and fodder radish. See seeding rate below. The kale seed must be treated for flea beetle.   |
| 6.  | Drilling is the preferred sowing method.   |
| 7.  | Pre-sowing weed control can be used.   |
| 8.  | After the crop has been successfully established, the use of pesticides is not permitted; except for the spot treatment of noxious and invasive weeds.   |
| 9.  | Fertiliser can be applied at a maximum of half rate for the crop prescribed in Statutory Instrument 31 of 2014. <b>SI 605/2017) (SI 65/2018) (SI 40/2020)</b>  |
| 10. | The margin must be fenced off and stockproof from the time it is sown.   |
| 11. | <p>The management regime for the 8* metre Grey Partridge Mix is as follows;</p> <p>Year 1 - Establish the 8 metre Grey Partridge Mix.</p> <p>Year 2 – Leave the entire 8 metre Grey Partridge Mix in situ</p> <p>Year 3 – Re-establish 4 metres of the 8 metre Grey Partridge Mix. Leave the other 4 metres in situ.</p> <p>Year 4 – Re-establish the other 4 meters of the 8 metre Grey Partridge Mix. Leave 4 metres in situ.</p> <p>Year 5 – Re-establish the first 4 meters of the 8 metre Grey Partridge Mix. Leave the other 4 metres in situ.</p> <p><b>Year 6 - Re-establish the other 4 meters of the 8 metre Grey Partridge Mix. Leave 4 metres in situ.</b></p> <p><b>For any subsequent years – follow the rotation as outlined above.</b></p> <p>*Note where the farmer is delivering the margin via a 3 metre drill, the management regime is as follows</p> <p>Year 1 - Establish the 9 metre Grey Partridge Mix.</p> <p>Year 2 – Leave the entire 9 metre Grey Partridge Mix in situ.</p> <p>Year 3 – Re-establish 6 metres of the 9 metre Grey Partridge Mix. Leave the other 3 metres in situ.</p> |

|                   |  |
|-------------------|--|
|                   | <p>Year 4 – Re-establish the other 3 meters of the 9 metre Grey Partridge Mix in situ. Leave 6 meters in situ.</p> <p>Year 5 – Re-establish the first 6 meters of the 9 metre Grey Partridge Mix. Leave the other 3 metres in situ.</p> <p><b>Year 6 – re-establish the other 3 meters of the 9 metre Grey Partridge Mix in Situ. Leave 6 meters in situ</b></p> <p><b>For any subsequent years– follow the rotation as outlined above</b></p>   |
| <p><b>12.</b></p> | <p>The management regime for the 4* metre grass margin is as follows;</p> <p>Year 1 - Establish the 4 metre grass margin. Top/mulch if required</p> <p>Year 2 – Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</p> <p>Year 3 –Leave in situ</p> <p>Year 4 – Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</p> <p>Year 5 – Leave in situ</p> <p>Year 6 - Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</p> <p>For any subsequent years – follow the rotation as outlined above</p> <p>Note where the farmer is delivering the margin via a 3 metre drill, the management regime is as follows;</p> <p>Year 1 - Establish the 3 metre grass margin. Top/mulch if required</p> <p>Year 2 – Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</p> <p>Year 3 –Leave in situ</p> <p>Year 4 – Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</p> <p>Year 5 – Leave in situ</p> <p><b>Year 6 - Topping/Mulching after 31<sup>st</sup> August and before 15<sup>th</sup> January</b></p> <p><b>For any subsequent years– follow the rotation as outlined above</b></p> |

**Seed Mix and Seeding rate for the Grey Partridge Mix:**

| <b>CROP TYPE</b>  | <b>Minimum Seed Rate</b> |
|-------------------|--------------------------|
| Triticale         | 40 kg/ha                 |
| Kale              | 3kg/ha                   |
| Lucerne           | 4 kg/ha                  |
| Perennial chicory | 2 kg/ha                  |
| Fodder radish     | 1 kg/ha                  |

**Further information:**

For a map of eligible Grey Partridge land areas - see Appendix 1b.

## 6. Hen Harrier

### Objective:

To promote the maintenance and creation of suitable breeding and foraging habitats for the Hen Harrier.

### Background:

Hen Harriers are suffering serious population declines nationally and regionally. By improving and managing the habitat of the Hen Harrier you are also benefitting an assemblage of birds including Skylark, Snipe, Meadow Pipit, Curlew, Merlin and Short-Eared Owl. Hen harriers require a mosaic of habitat types. Extensively grazed pasture consisting of taller tussock vegetation, rushy pastures, heather, scrub, and hedgerows are all suitable as hunting/foraging habitats during the breeding season. Typical nesting habitats include: heather, bog and scrub areas.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |   |
|----|---|
| 1. | Produce a suitable sward. This may include heather and/or scrub where that is currently and continues to be eligible for payment, under the Basic Payment Scheme. This heather and/or scrub must continue to be managed appropriately to optimise structural diversity for the benefit of the Hen Harrier in the parcel or field. |
| 2. | The action must be delivered on full LPIS parcel(s). The LPIS plots selected must be marked on the map submitted with the GLAS application.   |
| 3. | Traditional grazing practices that promote and maintain the development of tall and tussock vegetation (>10cm high) throughout the parcel must be undertaken. The parcel(s) cannot be grazed intensively by sheep.  |
| 4. | Maximum chemical nitrogen usage is 40 kg N per ha per annum on parcels within the GLAS contract.  |
| 5. | Noxious and invasive weeds must be controlled by spot spraying or mechanically.   |
| 6. | Parcels with rush cover are valuable to the harrier, with a target rush cover of up to 70%.   |

|    |   |
|----|---|
|    | with tussock type vegetation between the rushes. This can be delivered by either grazing and/or topping. If grazing does not prevent rushes from exceeding 70% cover, mowing/topping may be necessary; however where this is practiced it must be in alternating strips of 10m on a rotational basis over the course of the contract. |
| 7. | Hedgerows on Hen Harrier parcels cannot be cut between 1 <sup>st</sup> March and the 1 <sup>st</sup> October annually.  |
| 8. | <b>Continue the requirements as listed above for extension period.</b>  |

**Recommendations:**

If choosing this action, hedgerow rejuvenation, hedgerow planting and wild bird cover actions are recommended complementary actions which should be selected where relevant to the farm. Selecting these actions can greatly enhance the habitat value for the hen harrier especially where there is a low density of existing landscape features. Hedgerow management should aim to achieve intact and dense hedgerows.

If an area has been covered by dense rushes for a number of years (e.g. as evidenced by lodging of rush or encroachment of scrub) and the farmer now wishes to commence controlling rushes, he/she should contact NPWS in advance, to establish if the site holds roosting/nesting harriers.

## 7. Twite (A, B and C)

### Objective:

To develop and maintain nesting and foraging habitats for Twite birds during the breeding and wintering season.

### Background:

The Twite is a Red-listed Bird of Conservation Concern in Ireland with recent data indicating a decline in number of 78% since the 1970s. The Twite breeding season occurs on moorland-type farmland habitats (typically characterised by being extensively-grazed dry siliceous heath, often with areas of dense Bracken). Controlled grazing at targeted times of the year on suitable sites will encourage heather and Bracken growth which will develop a suitable nesting habitat for Twite birds.

Actions separated into Twite A, B and C.

Twite A: Semi-natural/Semi-improved Grassland Field Management Option for Breeding Twite.

Twite B: Improved Grassland Field Management Option for Breeding Twite.

Twite C: Twite Winter Feeding Option.

GLAS has three different prescriptions for the Twite depending on the type of vegetation and species mix that exist on the LPIS parcels selected for this action. Your advisor will advise you on which of the option(s) you should take. Only one Twite option can be selected per LPIS parcel.

### Twite A

The aim of this option is to create ideal foraging conditions for Twite within grassland fields that have typically, been subject to relatively low levels of agricultural improvement, such that they contain a range of target plant species on which Twite feed (e.g. Sorrel, Autumn Hawkbit, Cat's ear and Dandelion). Actions within this option are designed to encourage seeding of these plants by either late mowing or appropriate grazing management.

***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (boxes/sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological**

**Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

**Requirements:**

|    |   |
|----|---|
| 1. | Produce a suitable sward.   |
| 2. | The action must be delivered on full LPIS parcel(s).The LPIS plots selected must be marked on the map submitted with the GLAS application.  |
| 3. | <u>Grazing:</u> Where the parcel is grazed, approximately 50% of the field/parcel should be grazed from 15 <sup>th</sup> April to 15 <sup>th</sup> June with the other approximately 50% grazed from 16 <sup>th</sup> June to 15 <sup>th</sup> August annually. |
| 4. | <u>Mowing:</u> Where the parcel is mowed for hay or silage, this cannot be undertaken between 15 <sup>th</sup> April and 15 <sup>th</sup> August annually.  |
| 5. | Pesticides are not permitted, except for spot treatment of noxious and invasive weeds.  |
| 6. | Maximum chemical nitrogen usage is 35 kg N per ha per annum on parcels within the GLAS contract.  |
| 7. | Topping is not permitted between 15 <sup>th</sup> April and 15 <sup>th</sup> August annually.   |
| 8. | <b>Continue the requirements as listed above for extension period.</b>  |

## Twite B

The aim of this option is to create ideal foraging conditions for Twite within grassland fields that have been substantially improved, such that they currently contain few (if any) of the target plant species which Twite feed on (e.g. Sorrel, Autumn Hawkbit, Cat's ear and Dandelion).

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (boxes/sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|     |  |
|-----|--|
| 1.  | Sow and establish a 12m wide margin by 31 <sup>st</sup> May 2016.  |
| 2.  | The action must be delivered along the full length of an existing field or LPIS parcel(s) boundary. The LPIS plots selected must be marked on the map submitted with the GLAS application.   |
| 3.  | These margins cannot be grown in parallel strips within the LPIS parcel or field.  |
| 4.  | The minimum linear length is 50 metres.  |
| 5.  | The margin must be established by chain harrowing, broadcasting the seed and rolling.  |
| 6.  | Sow a specific seed mix (appendix 14) which contains at least 15% each of Dandelion, Sorrel, Cats Ear and Yellow Rattle. The remainder of the mix may be made up from any of the remaining plants in Appendix 14. This mix must be sown at a minimum rate of 1g for 10m <sup>2</sup> (1kg/ha). |
| 7.  | The margin must be fenced off and stockproof from 1 <sup>st</sup> April until 31 <sup>st</sup> August annually.  |
| 8.  | Mowing or topping is not permitted from 1 <sup>st</sup> April until 31 <sup>st</sup> August annually.  |
| 9.  | Between the 31 <sup>st</sup> August and the 15 <sup>th</sup> April annually, the margin must be grazed and/or mown. If mown, all cuttings must be removed.   |
| 10. | Additional establishment actions may be required in subsequent years to ensure the presence of appropriate seeding species within the margin.  |
| 11. | <b>Continue the requirements as listed above for extension period.</b>   |

## Twite C

The aim of this option is to sow a seed crop mix that provides winter food sources for Twite. It is likely that this will benefit other farmland birds and fauna. The winter feed option is a spring-sown crop that is left un-harvested over winter to provide food for farmland birds.

The minimum area to be sown is 0.25 hectares and the maximum area for payment is 3 hectares.

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (boxes/sand), Farmland Habitat (Private Natura), Low Emission Slurry Spreading, Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |   |
|----|---|
| 1. | Successfully establish a Twite Winter Feed crop by sowing a suitable seed mix by the 31 <sup>st</sup> May 2016.   |
| 2. | This action must be delivered on a full LPIS parcel. LPIS parcels selected must be marked on the map submitted with the GLAS application. The Twite Winter Feed Crop must remain in the same place for the duration of the GLAS contract.   |
| 3. | The crop mix can be sown either annually or bi-annually (see example 1 and 2 below) in springtime, but not later than the 31 <sup>st</sup> of May annually, and the crop must remain in place until the following 15 <sup>th</sup> of March annually.<br>The 1 year mix must contain a cereal (either oats or triticale) and at least one species from the following: Oilseed Rape, Radish, Mustard or Turnip.<br>The 2 year mix must contain a cereal (either oats or triticale) and kale. |
| 4. | Drilling is the preferred sowing method; however, broadcasting of the seed is permitted. If you are broadcasting, increase the seed rates by between one third (for smaller seeds) and a half (for larger seeds), or roll immediately post sowing, to ensure appropriate establishment.   |
| 5. | Pre-sowing weed control can be used.  |
| 6. | Pesticides cannot be applied post sowing. However, spot treatment with herbicide for noxious weeds and invasive species is permitted.   |
| 7. | Fertiliser is allowed at a maximum of half rate for the crop prescribed in SI 31 2014, (SI  |

|            |  |
|------------|--|
|            | <b>605/2017) (SI 65/2018) (SI 40/2020)</b> for the relevant cereal crop in the mix.  |
| <b>8.</b>  | Each parcel of Twite Winter Feed must remain fenced or otherwise inaccessible to livestock from the time of establishment to the 15 <sup>th</sup> of March for annual mixes and from the time of establishment to the 15 <sup>th</sup> of March in year two for bi-annual mixes. In the year in which parcels are being fully replanted, livestock may enter the parcel from 15 <sup>th</sup> March to planting time to aid in the decomposition of the trash. |
| <b>9.</b>  | No harvesting can take place.  |
| <b>10.</b> | <b>Continue the requirements as listed above for extension period.</b>   |

### Recommendations

Consideration should be given to growing the crop adjacent to cover. For example, beside hedgerows or near woodland or scrub. It may also be grown along a stream or river where it can have the dual benefit of acting as a buffer margin. However, it must be placed outside the 2 metre buffer zone along a watercourse.

### Example 1: One year seed mixes that can be planted annually – can be mixed together

| Mix of Seed                | Rate of Seed                                     |
|----------------------------|--|
| Oats and Mustard           | 75 kg/ha of oats<br>10 kg/ha of mustard          |
| Triticale and Mustard      | 75 kg/ha of triticale<br>10 kg/ha of mustard     |
| Triticale and Oilseed Rape | 75 kg/ha of triticale<br>3 kg/ha of oilseed rape |

### Example 2: Two Year Mix

| Mix of Seed  | Rate of Seed                                   |
|--|--|
| Establish half the plot with oats/triticale and half with kale | 75 kg/ ha of oats/triticale<br>3 kg/ha of kale |
| Kale remains in situ and re-establish cereal crop              | 75 kg/ha of oats/triticale                     |
| Re-establish half as kale and half as cereal                   | 75 kg/ha of oats/triticale<br>3 kg/ha of kale  |
| Kale remains in situ and re-establish cereal crop              | 75 kg/ha of oats/triticale                     |
| Re-establish half as kale and half as cereal                   | 75 kg/ha of oats/triticale                     |

|  |                                  |
|--|----------------------------------|
|  | 3kg/ha of kale                   |
| <b>Kale remains in situ and re-establish cereal crop</b>               | <b>75kh/ha of oats/triticale</b> |
| <b>For any subsequent years– follow the rotation as outlined above</b> |                                  |

For a map of eligible Twite land areas - see Appendix 1c.

## Catch Crops

### Objective

To establish a catch crop that will absorb nutrients and prevent leaching in the autumn/winter period.

### Background:

The primary aim for catch crops is for soil protection during fallow periods over the winter period. There is a reduction in soil erosion during heavy rainfall periods from reduced surface run-off and increased water infiltration. While protecting soil against exposure to the elements with foliage, cover crop roots break and condition the soil preventing slumping, thus ensuring easier cultivations and better soil tilth the following spring. Depending on the species, catch crops increase the absorption of residual nitrogen and reduce nitrogen leachate from soil.

Note: This action is only applicable on LPIS parcels declared as 'arable' in 2015.

Excluding where catch crops are grown as equivalence for crop diversification, they may be rotated on different LPIS parcels each year of your contract. Where catch crops are rotated, the area sown each year must be at least equal in size to the contract area established in year 1 and the relevant parcel(s) selected must be notified to DAFM through the BPS application annually.

**This action is separated into Whole Parcel (WP) and Part Parcel (PP).**

### Catch Crops WP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, Low Emission Slurry Spreading, Minimum Tillage, Rare Breeds, Traditional Dry Stone Wall Maintenance**

### Catch Crops PP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Environmental Management of Fallow Land PP, Low Emission Slurry Spreading, Low Input Permanent Pasture PP, Rare Breeds, Traditional Hay Meadow PP, Wild Bird Cover PP**

**Requirements:**

|    |   |
|----|---|
| 1. | Establish a catch crop annually by the 15 <sup>th</sup> September either by broadcasting or drilling.   |
| 2. | Minimum area 10 ha (Priority Action) or 4 ha (General Action) and the maximum area is 32 ha. This area can be rotated from one year to the next.  |
| 3. | The action can be delivered on full or split LPIS parcel(s). Where the action is on a split parcel it must be digitised out and marked on the map submitted with the GLAS application.  |
| 4. | Use light cultivation techniques (i.e. shallow grubbing). Ploughing is not permitted.   |
| 5. | Sow a suitable cover crop which must consist of at least 2 species in an integral mix from the list set out below.  |
| 6. | The under sowing or sowing grass crops is not permitted.  |
| 7. | The catch crops must remain in situ from the date of sowing to the 1 <sup>st</sup> December annually.   |
| 8. | While grazing of catch crops is permitted, this cannot take place until after the 1 <sup>st</sup> December annually and participants should ensure it only takes place on parcels where soil erosion is not considered by your GLAS advisor to be an issue. |
| 9. | <b>Continue the requirements as listed above for extension period.</b>  |

**List of Prescribed Catch Crops**

| COVER CROP SPECIES  | SEED RATE KG/HA | COVER CROP SPECIES | SEED RATE KG/HA |
|---------------------|-----------------|--------------------|-----------------|
| Buckwheat           | 35 – 50         | Rye                | 70 – 90         |
| Crimson Clover      | 10 – 15         | Tillage Radish     | 5               |
| Berseem Clover      | 10 – 15         | Vetch              | 12              |
| Forage/Fodder Rape  | 3 – 5           | Leafy Turnip       | 5               |
| Mustard             | 15 – 20         | Peas               | 30              |
| Oats (& Black Oats) | 75 – 100        | Beans              | 100 – 120       |
| Phacelia            | 5 – 10          |                    |                 |

Additional species may also be considered eligible provided the objectives of the measure are met – email [glas@agriculture.gov.ie](mailto:glas@agriculture.gov.ie)

Note: Spraying volunteer cereals is permitted within the Catch Crops to prevent a carryover of disease through the green bridge

## **Commonage Management Plan (CMP)**

### **Objective:**

To ensure that commonage lands are appropriately grazed and managed to ensure they remain in GAEC and are compliant with eligibility criteria.

Commonages make up approximately 422,000 hectares of the land area in Ireland. The existing cross compliance requirements set down good agricultural and environmental conditions (GAEC) and statutory management requirements (SMR's) which must be followed to ensure the sustainable management of all soils in Ireland, including commonages, many of which are blanket bogs. These peatlands provide a wide range of benefits through agriculture, biodiversity maintenance, carbon storage and sequestration, forestry, water regulation and flood attenuation, fuel for electricity generation and turf for homes, employment, land for wind energy, amenity areas, peat for horticulture and land for housing and infrastructure. Further conditions for certain Natura Sites is set out in appendix 15.

Note: a GLAS participant will be paid on the GLAS Commonage Area for this action. The GLAS Commonage Area includes certain exclusions specifically Bog, Habitat, Marsh, Rough Grazing and Scrub. This is because the Department recognises that these areas deliver significant biodiversity value on commonages.

### **If you select this action the only other actions you can select on this LPIS parcel is:**

#### **Rare Breeds.**

Note: Where a farmer has shares on more than one commonage, he/she will be required to indicate that they are willing to sign up to a CMP on all other commonages should one become available. Failure to enter into a CMP on second and subsequent commonage where your first commonage has a CMP will result in your GLAS application being rejected/ terminated and all payments recouped.

### **Requirements:**

|           |   |
|-----------|---|
| <b>1.</b> | Only 1 GLAS Advisor is allowed to prepare and submit a CMP for each individual commonage. |
|-----------|---|

|     |  |
|-----|--|
| 2.  | A CMP must list all the herd numbers who are signed up to and who have agreed to be bound by the conditions and farming requirements set out in the CMP.   |
| 3.  | Each herd number on a CMP must have their individual minimum number of ewe equivalents by 31st December 2016 and retain for the remainder of the GLAS Contract   |
| 4.  | Each CMP must reach the total minimum for the commonage by 31st December 2018 and retain for the remainder of the GLAS Contract.   |
| 5.  | The advisor and individuals within the CMP can decide how the total minimum number of ewe equivalents will be delivered once each herd number on the CMP keeps their individual minimum ewe equivalent by 31st December 2016 to the end of the GLAS contract.  |
| 6.  | A CMP cannot exceed the total maximum ewe equivalents for the commonage at any time during the GLAS contract.  |
| 7.  | All livestock must be marked with the herd owners flock colours or markings.   |
| 8.  | The GLAS advisor in drawing up a CMP for a commonage must be cognisant of the soil type and vegetation on the commonage when prescribing an appropriate grazing regime and other management practices for a commonage. In addition, the GLAS advisor must consider if there is a risk of soil/peat erosion.  |
| 9.  | The advisor must clearly state all activities which can be carried out on the commonage in terms of controlled burning, control of dumping etc. The advisor must also clearly set out within the 5 year CMP contract when and where any of these activities will be undertaken on the GLAS map accompanying your application. Note NPWS approval may be required for some of these activities. |
| 10. | Each herd number must submit their annual sheep census to the Department.  |
| 11. | The reference area of the commonage as declared on the 2015 BPS, must not decrease over the course of the GLAS contract.   |
| 12. | <b>CMP must be adhered to during the extension period.</b>   |
| 13. | <b>Continue the requirements as listed above for extension period.</b>   |

## Coppicing of Hedgerows

### Objective:

To rejuvenate overgrown hedgerows, increase biodiversity and enhance the visual landscape.

### Background:

Mature hedgerows give the Irish landscape its distinctive character and field pattern and provide an important wildlife habitat especially for woodland flora and fauna. Hedgerows provide a barrier and shelter for livestock, reduces the spread of disease and define the farm boundaries. Coppicing is a way of rejuvenating hedgerows.

**Note:** External farm boundaries CANNOT be entered for this action and will not be paid unless the external farm boundary adjoins a public road, a private laneway or a watercourse or water body. You must have control of both sides of the hedgerow being coppiced for ongoing maintenance.

### *If you select this action the only other actions you can select on this LPIS parcel are:*

Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Grey Partridge, Hen Harrier, Catch Crops WP, Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP and Traditional Orchard.

### Requirements:

|    |  |
|----|--|
| 1. | Coppice all selected hedgerows by 28 <sup>th</sup> February 2017. Note hedges can only be coppiced between 1 <sup>st</sup> September and 28 <sup>th</sup> February annually. |
| 2. | The minimum linear length that must be coppiced is 10 metres and this must be in a single continuous length.   |
| 3. | The maximum linear length that can be coppiced on a holding is 1,000 metres.   |
| 4. | The location and length (metres) to be coppiced must be identified on the selected LPIS parcels and marked on the map submitted.   |

|     |   |
|-----|---|
| 5.  | Coppicing must be carried out with a chainsaw or circular saw. Cut stem to less than 15cm from ground level.  |
| 6.  | Infilling must be carried out if gaps are present in the hedgerow that will not be filled by re-growth from the coppiced hedgerow. Plant a minimum of 4 plants per metre consisting of whitethorn, blackthorn or holly in line with the existing hedge. Any plants that die must be replaced during the next dormant season. Infilling of gaps must be undertaken by 28 <sup>th</sup> February 2017.            |
| 7.  | All newly coppiced hedges in a grass or tillage field must be fenced off and protected from livestock, from the time the hedge is coppiced. However, where the coppiced hedgerow bounds a private laneway, public road or watercourse, fencing is not required on the laneway/road or water body side as long as the hedge is not being damaged by livestock. The fence must be stockproof and fit for purpose. |
| 8.  | Grass and other competing vegetation must be controlled.  |
| 9.  | Plants must be trimmed over the course of the contract to ensure a dense hedgerow develops.   |
| 10. | Individual mature standard trees within the selected hedgerow must not be coppiced.   |
| 11. | <b>Continue the requirements as listed above for extension period.</b>  |

**Further information:**

As whitethorn and blackthorn are potential carriers of diseases that are harmful to plants in the wider environment, it is mandatory that producers of these plants are registered and inspected by DAFM to ensure their freedom of these diseases. To check if your supplier is properly registered, either email [plantandpests@agriculture.gov.ie](mailto:plantandpests@agriculture.gov.ie) or call 01-5058885. Participants should ensure that they retain the plant passport that accompanied the plants upon purchase, for the duration of the GLAS contract.

Species that are suitable for coppicing include Alder, Blackthorn, Ash, Birch, Hawthorn, Hazel, Holly, Sweet Chestnut, Sycamore and Willow.

Further information is available from the following websites

<http://www.peakdistrict.gov.uk>

<http://www.irishhedgerows.weebly.com>

<http://www.dardni.gov.uk>

<http://www.teagasc.ie>

## Environmental Management of Fallow Land

### Objective:

To provide food and habitat for ground nesting birds other fauna and insects throughout the nesting season.

### Background:

Fallow land in arable rotations has been a traditional feature across Europe for much of its agricultural history. However, changes in arable production during the latter half of the twentieth century along with technological improvements have led to reduced areas of fallow land. Fallow or set-aside land has multiple benefits for biodiversity including benefits for: breeding birds, wintering birds from crop stubbles and weed seeds; small mammal (and their predators) and insect and other invertebrates.

Note: This action is only applicable on LPIS parcels declared as 'arable' in 2015. The action cannot move during the GLAS contract.

**This action is separated into Whole Parcel (WP) and Part Parcel (PP)**

### Environmental Management of Fallow Land WP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand)**

### Environmental Management of Fallow Land PP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Catch Crops PP, Wild Bird Cover PP**

### Requirements:

|    |   |
|----|---|
| 1. | Establish a fallow area through sowing a grass seed mix by 31 <sup>st</sup> of May 2016.  |
| 2. | The minimum area is 0.25 ha and the maximum area is 3 ha.   |
| 3. | The action can be delivered on full or split LPIS parcels. Where the action is on a split parcel it must be digitised out and marked on the map submitted.              |
| 4. | Sow a grass seed mix containing at least 60% Cocksfoot or Timothy or a combination of these. Grass seed labels and receipts should be kept for the duration of the GLAS |

|     |  |
|-----|--|
|     | contract.  |
| 5.  | Pre-sowing weed control can be used.   |
| 6.  | After the crop is sown the use of pesticides is not permitted, except for the spot treatment of noxious and invasive weeds (see appendix 16).  |
| 7.  | Use of fertilisers (chemical or organic) is not permitted.   |
| 8.  | The parcel must be mulched or mown at least once a year, but not between March 1 <sup>st</sup> and September 1 <sup>st</sup> each year. Off takes are not allowed                                      |
| 9.  | The parcel must be fenced off and stockproof and grazing by livestock is not permitted. Where a parcel is split, a suitable fence must be in place to prevent livestock from entering the fallow land. |
| 10. | The fallow parcel cannot be used as a storage area for any materials (e.g. straw bales, big-baled silage, farmyard manure etc).  |
| 11. | Continue the requirements as listed above for extension period.  |

## Farmland Habitat (Private Natura)

### Objective:

To avoid farming practices that cause environmental damage and protect vulnerable habitats such as wetlands, which in turn helps to safeguard animals and plants which occupy them.

### Background:

The aim of Natura sites is to conserve valuable and threatened species and habitats.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese & Swans, Grey Partridge, Hen Harrier, Twite (A, B & C), Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Traditional Dry Stone Wall Maintenance and Traditional Hay Meadow WP.**

### Requirements:

|    |   |
|----|---|
| 1. | A Sustainable Management Plan must be completed for each site code which contains private Natura LPIS parcels on your holding. It must address the following  |
|    | a. Specify how the parcel is normally farmed and managed i.e. grazing only, tillage etc.  |
|    | b. Where the parcel is normally grazed, specify the livestock type and number of months grazing takes place on the parcel(s).   |
|    | c. Detail a general site description and specify the dominant habitat type.   |
|    | d. Set stocking levels that avoid eutrophication, overgrazing, undergrazing and erosion.  |
| 2. | Supplementary feeding of meal is only permitted on areas where it is currently practiced and appropriate and where the GLAS advisor is of the view that supplementary feeding of meal will not impact on the Natura site. Where it is practiced, the meal troughs should be moved frequently to avoid poaching. |
| 3. | Invasive and noxious weeds (see appendix 16) must be controlled. Pesticides are permitted for spot treatment application.   |
| 4. | <b>The SMP must be adhered to during the extension period.</b>  |

**5.**

**Continue the requirements as listed above for extension period.**

**Further information:**

For a full list of ARC's – see Appendix 13.

For a full list of Conditions for Certain Natura Sites - see Appendix 15.

## Laying of Hedgerows

### Objective:

To rejuvenate overgrown hedgerows, increase biodiversity and enhance the visual landscape.

### Background:

Mature hedgerows give the Irish landscape its distinctive character and field pattern and provide an important wildlife habitat especially for woodland flora and fauna. Hedgerows provide a barrier and shelter for livestock, stop spread of disease and define the farm boundaries. Laying is a way of rejuvenating hedgerows.

**Note:** External farm boundaries CANNOT be entered for this action and will not be paid unless the external farm boundary adjoins a public road, a private laneway or a watercourse or water body. You must have control of both sides of the hedgerow for laying and for ongoing maintenance.

### *If you select this action the only other actions you can select on this LPIS parcel are:*

Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Grey Partridge, Hen Harrier, Catch Crops WP, Coppicing of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP and Traditional Orchards.

### Requirements:

|    |  |
|----|--|
| 1. | Lay all selected hedgerows by 28 <sup>th</sup> February 2017. Note hedges can only be laid between 1 <sup>st</sup> September and 28 <sup>th</sup> February annually. |
| 2. | The minimum linear length that must be laid is 10 metres and this must be in a single continuous length.   |
| 3. | The maximum linear length that can be laid on a holding is 1,000 metres.   |
| 4. | The location and length (metres) to be laid must be identified on the selected LPIS parcels and marked on the map submitted.   |
| 5. | Laying cannot be carried out using heavy machinery.  |

|     |  |
|-----|--|
| 6.  | Infilling must be carried out if gaps are present in the hedgerow that will not be filled by re-growth from the coppiced hedgerow. Plant a minimum of 4 plants per metre consisting of whitethorn, blackthorn or holly in line with the existing hedge. Any plants that die must be replaced during the next dormant season. Infilling of gaps must be undertaken by 28 <sup>th</sup> February 2017. |
| 7.  | All newly laid hedges in a grass or tillage field must be fenced off and protected from livestock, from the time the hedge is laid. However, where the laid hedgerow bounds a private laneway, public road or watercourse, fencing is not required on the road or water body side as long as the hedge is not being damaged by livestock. The fence must be stockproof and fit for purpose.          |
| 8.  | Individual mature standard trees within the selected hedgerow must not be laid.  |
| 9.  | Grass and other competing vegetation must be controlled  |
| 10. | Plants must be trimmed over the course of the contract to ensure a dense hedgerow develops.  |
| 11. | <b>Continue the requirements as listed above for extension period.</b>   |

**Further information:**

As whitethorn and blackthorn are potential carriers of diseases that are harmful to plants in the wider environment, it is mandatory that producers of these plants are registered and inspected by DAFM to ensure their freedom of these diseases. To check if your supplier is properly registered, either email [plantandpests@agriculture.gov.ie](mailto:plantandpests@agriculture.gov.ie) or call 01-5058885. Participants should ensure that they retain the plant passport that accompanied the plants upon purchase, for the duration of the GLAS contract.

Species that are suitable for coppicing include Alder, Blackthorn, Ash, Birch, Hawthorn, Hazel, Holly, Sweet Chestnut, Sycamore and Willow.

For guidance on laying - see Appendix 11 and also the following websites.

<http://www.crann.ie>

<http://www.hedgelaying.ie>

<http://www.teagasc.ie>

## Low Emission Slurry Spreading

### Objective:

To improve the recycling of organic fertiliser and to contribute to reduced nitrous oxide emissions, ammonia emissions and odours.

### Background:

The method and timing of slurry application are two main factors that determine the utilization efficiency of these nutrients by the growing crop, whether grass or arable. Using low emission technology improves the utilisation efficiency of slurry compared to the traditional splash-plate. Other benefits include, reduced phosphorus run-off, a wider window of opportunity to apply slurry, reduced tainting of the grazing sward and reduced smell from slurry spreading.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese and Swans, Grey Partridge, Hen Harrier, Twite (ABC), Catch Crops WP & PP, Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Input Permanent Pasture WP & PP, Minimum Tillage, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP & PP and Wild Bird Cover WP & PP.**

### Requirements:

|           |   |
|-----------|---|
| <b>1.</b> | All of the slurry applied on the farm (produced and/or imported) must be spread by one or a combination of the following methods for each year of the contract.<br>a) Band spreading<br>b) Injection systems<br>c) Trailing shoe                  |
| <b>2.</b> | All slurry must be managed and spread in compliance with Statutory Instrument 31 of 2014 (the Nitrates Regulations) <b>(SI 605/2017) (SI 65/2018) (SI 40/2020).</b>   |
| <b>3.</b> | Provide documentary evidence to confirm; the spreading method used, and the volumes spread on the holding. For example, a calculation of slurry produced, imported and spread and/or a receipt from the contractor or other evidence as required. |

|    |  |
|----|--|
| 4. | Farmer must indicate on his annual slurry declaration return to Johnstown Castle the LPIS parcels where the slurry was spread. |
| 5. | <b>Farmer must continue to spread all slurry by LESS methods during the extension period.</b>                                  |
| 6. | <b>Continue the requirements as listed above for extension period.</b>   |

**GLAS participants applying for a Nitrates Derogation will not be eligible for a GLAS payment for this action from 2021 onwards, regardless of whether stocking rate exceeds 170KgN/ha.**

**GLAS participants operating at a whole farm stocking rate of 170 kg (or above) nitrogen per hectare from grazing livestock manure are ineligible for a GLAS payment for this action from 15<sup>th</sup> April 2021 onwards.**

## Low Input Permanent Pasture

### Objective:

To promote a grassland management system that through appropriate grazing levels and restriction on fertiliser and pesticide use results in a more diverse sward with an increase in flora and fauna.

### Background:

Permanent pastures extensively grazed and managed with low inputs sustain a greater variety of plants and wildlife.

**This action is separated into whole parcel (WP) and part parcel (PP)**

### Low Input Permanent Pasture WP

***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Protection of Archaeological Monuments (Grassland), Protection of Watercourses from Bovines, Rare Breeds, Traditional Dry Stone Wall Maintenance**

### Low Input Permanent Pasture PP

***If you select this action the only other actions you can select on this LPIS parcel are:***

**Catch Crops PP, Low Emission Slurry Spreading, Rare Breeds, Traditional Hay Meadow PP, Wild Bird Cover PP**

Notes: Where the Low Input Permanent Pasture parcel is situated within a designated Natura 2000 site, farmers can choose to be paid for this action rather than Natura once the parcel complies with the Low Input Permanent Pasture Specification and they comply with the Natura designation.

Farmers who apply for a Nitrates Derogation in any year of the GLAS contract will be ineligible for this action and there will be clawbacks of any Low Input Permanent Pasture payments made to date.

Participants who select this action must have a grazing enterprise of owned livestock on the holding.

**Requirements:**

|     |  |
|-----|--|
| 1.  | Select a suitable pasture.   |
| 2.  | The action can be delivered on full or split LPIS parcel(s). Where the action is on a split parcel, it must be digitised out and marked on the map submitted. Parcels must be fenced and stockproof from the commencement date of the GLAS contract.   |
| 3.  | The maximum area payable is 10 ha of Low Input Permanent Pasture and/or Traditional Hay Meadow.  |
| 4.  | Selected LPIS parcels must not have been cultivated in the last 8 years and must have been declared as forage on the SPS for the previous 8 years.   |
| 5.  | The pasture must contain a minimum of four grass species (excluding Ryegrasses), for example cocksfoot, timothy, bent grasses, fescues, sweet vernal, Yorkshire fog, etc and a minimum of three other non-grass plant species, for example plantain, chickweed, trefoils etc and these must be reasonably dispersed throughout the field. There must be less than 30% Ryegrass cover.    |
| 6.  | The sward must be maintained by grazing and there must be a grazing enterprise of owned livestock on the holding.  |
| 7.  | Parcels cannot be cut for hay or silage  |
| 8.  | Parcels cannot be topped between 15 <sup>th</sup> March and the 15 <sup>th</sup> July annually.  |
| 9.  | Maximum chemical nitrogen usage is 40 kg N per ha per annum.   |
| 10. | Lime may be applied in accordance with soil analysis results, if it has been traditionally spread on the parcels.  |
| 11. | Pesticides are not permitted, except for spot treatment of noxious and invasive weeds and rushes. Where present, rushes must be controlled either mechanically, by weed wiping and/or by spot spraying. While weed wiping and/or spot spraying can take place between 15 <sup>th</sup> March and 15 <sup>th</sup> July, topping to control rushes cannot take place between these dates. |
| 12. | Supplementary meal feeding may take place on these parcels, provided meal troughs are moved to avoid poaching. Where the parcel is a Natura parcel, the GLAS advisor and participant should ensure that the supplementary feeding of meal does not impact negatively on the Natura site.   |
| 13. | <b>Continue the requirements as listed above for extension period.</b>   |

Note: In GLAS there will be no cross compensation allowed between Low Input Permanent Pasture and Traditional Hay Meadows. Therefore, if a farmer commits to deliver 5 hectares of Low Input Permanent Pasture and 5 hectares of Traditional Hay Meadow, they must deliver 5 hectares of each i.e. they cannot deliver 6 hectares of Low Input Permanent Pasture and 4 hectares of Traditional Hay Meadow.

## Minimum Tillage

### Objective:

To improve soil structure and increase soil organic matter.

### Background:

Minimum tillage means sowing a crop without inverting the soil i.e. the soil cannot be ploughed.

Minimum tillage has many advantages for both the farmer and the land. It can save fuel and time for the farmer. It reduces damage done to soil by rain, the breakdown of soil structure and reduces the formation of a hard pan in the soil. This measure also protects archaeological monuments within the topsoil and subsurface of the soil.

***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Catch Crops WP, Coppicing of Hedgerows, Laying of Hedgerows, Low Emission Slurry Spreading, Rare Breeds and Traditional Dry Stone Wall Maintenance**

### Requirements:

|    |  |
|----|--|
| 1. | Establish a crop using minimum tillage i.e. It must be sown without inverting the soil (soil cannot be ploughed).  |
| 2. | The minimum area is 10 ha where it is taken as a priority action and 4 ha where it is taken as a general action.   |
| 3. | This action must be taken on the same full LPIS parcel(s). The LPIS plots selected must be marked on the map submitted. The action must be maintained on the same LPIS parcel(s) for the entire contract period. |
| 4. | The action must be in place on the next crop establishment following approval into the scheme and for all subsequent years of the contract <b>and during the extension period.</b>                               |
| 5. | <b>Continue the requirements as listed above for extension period.</b>   |

## Planting a Grove of Native Trees

### Objective:

To encourage the planting of small groups of trees to provide a valuable pocket habitat and opportunity for carbon sequestration.

### Background:

Small groups or groves of trees provide a wide range of ecological benefits and create pocket habitats for both plants and animals. These benefits are increased further through the use of native tree species which colonised Ireland naturally after the last Ice Age. This measure will introduce more native trees into the Irish landscape, promoting our native biodiversity.

Note: Trees cannot be planted in hedgerows that are being entered for the coppicing or laying of hedgerow option or the planting of new hedgerow action. Trees cannot be planted on Natura land.

***If you select this action the only other actions you can select on this LPIS parcel are:***

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (grassland), Protection and Maintenance of Archaeological Monuments (tillage), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |  |
|----|--|
| 1. | Establish a grove of native trees in a single location only, i.e. you cannot plant the trees in a number of locations in a LPIS parcel or field. |
| 2. | Minimum area of 0.05 ha with 250 plants and maximum area of 0.09 ha with 450 plants.<br>The plants must be a minimum of 40cm tall when planted.  |
| 3. | Identify the location on the LPIS parcel selected and mark on the map submitted.   |
| 4. | Plant in the first dormant season after you receive written approval into GLAS and in any event before the 31 March 2016.                        |
| 5. | Use native tree species only, as listed in Appendix 4.   |
| 6. | Use plants that are derived from suitable seed sources from within Ireland which are regarded as being indigenous in nature. See Note A below.   |
| 7. | A minimum of 2 native species from Appendix 4 should be planted.   |

|     |   |
|-----|---|
| 8.  | Consider the physical conditions of each site, e.g. soil type, drainage, exposure, etc., and choose species that will succeed in such sites.  |
| 9.  | Planting cannot take place within the vicinity of overhead wires (See Note B below), within 20 m of railway line(s) or within 60 m of a dwelling house(s), or within 5 m of a watercourse |
| 11. | Trees must be planted in rows 2 metres apart with a distance of 1 metre between the plants within the rows.   |
| 12. | Replace failed or dead trees during the next dormant season.  |
| 13. | Trees must be protected from livestock and fenced off from the time of planting until the end of the contract.  |
| 14. | Grass and other competing vegetation must be controlled around the trees on an annual basis during the extension period   |
| 15  | <b>Continue the requirements as listed above for extension period.</b>  |

**Note A:** These plants should only be purchased from producers and suppliers who are registered under the Forest Reproductive Material Directive, and who can provide a 'Provenance Declaration Form' (See Appendix 6) for the material purchased, certifying that the plants used are derived from suitable seed sources from within Ireland which are regarded as being indigenous in nature. This requirement is intended to help protect Ireland's gene pool regarding native trees.

**Note B:** The required clearance distance depends on the voltage of the overhead line.

| Power line type  | Clearance distance (from centre of line) |
|--|--|
| Low voltage (230/400V)   | 5 m                                      |
| 10 kV and 38 kV  | 10 m                                     |
| 110 kV   | 31 m                                     |
| 220 kV   | 34 m                                     |
| 400 kV   | 37 m                                     |
| Note: All trees must be outside their falling distance from line support structures. |  |

For a list of native tree species for the planting of a Grove of Native Trees option, see Appendix 4.

## Planting New Hedgerow

### Objective:

To establish new hedgerows on farms to increase biodiversity, to enhance the visual landscape and to help protect water quality.

### Background:

**Mature hedgerows give the Irish landscape its distinctive character and field pattern and provide an important wildlife habitat, especially for woodland flora and fauna. Hedgerows provide a barrier and shelter for livestock, stop the spread of disease and define the farm boundaries.**

Where the Planting New Hedgerow action is taken on a farm boundary, the GLAS participant must ensure it is planted in such a manner that he/she has control of both sides of the new hedgerow and that he/she can maintain both sides of the new hedgerow. Note, where a fence has been erected under TAMS, the Planting of New Hedgerow Action cannot be planted inside of this fence. Trees cannot be planted on Natura land.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, Low Emission Slurry Spreading, Planting A Grove of Native Trees, Protection and Maintenance of Archaeological Monuments (Grassland), Protection and Maintenance of Archaeological Monuments (Tillage), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance and Traditional Orchards.**

### Requirements:

|    |  |
|----|--|
| 1. | Plant 6 plants per metre in a double row of whitethorn and/or blackthorn and/or holly by 31st March 2016.  |
| 2. | The minimum linear length that must be planted is 10 metres and this must be in a single continuous length   |
| 3. | The maximum length for which GLAS funding is available is 200 metres per holding.  |
| 4. | The location and length (metres) must be identified on the LPIS parcel(s) and marked on the map submitted. The new hedge must be a standalone hedge and not placed against an existing hedgerow or stone wall. |

|     |   |
|-----|---|
| 5.  | <b>Plants must be purchased from registered producers or registered growers – see below.</b>  |
| 6.  | All newly planted hedges whether planted in a grass or tillage field must be fenced off and protected from livestock, from the time the hedge is planted. The fence must be stockproof and fit for purpose. |
| 7.  | Grass and other competing vegetation must be controlled.  |
| 8.  | Plants must be trimmed over the course of the contract to ensure a dense hedgerow develops.   |
| 9.  | Failed or dead plants must be replaced at the earliest possible planting opportunity.   |
| 10. | <b>Continue the requirements as listed above for extension period.</b>  |

The Planting New Hedgerow Action cannot overlap with the Planting a Grove of Native Trees Option or the Traditional Orchards Option.

**As whitethorn and blackthorn are potential carriers of diseases that are harmful to plants in the wider environment, it is mandatory that producers of these plants are registered and inspected by DAFM to ensure their freedom of these diseases. To check if your supplier is properly registered, either email [plantandpests@agriculture.gov.ie](mailto:plantandpests@agriculture.gov.ie) or call 01-5058885. Participants should ensure that they retain the plant passport that accompanied the plants upon purchase, for the duration of the GLAS contract.**

## Protection and Maintenance of Archaeological Monuments

### Objective:

To enhance and maintain visual archaeological monuments in the farm landscape.

### Background:

All known archaeological monuments in the state are marked on maps and included on a list of monuments (The Record of Monuments and Places). This action aims to enhance and maintain archaeological monuments visible in both tillage and grassland landscapes. All monuments entered for this action must be visible and must be on parcels with a reference area i.e. be on UAA.

Note: Only monuments on The Record of Monuments and Places list and that are visible in the opinion of the advisor on the LPIS parcel(s) are eligible for this action. Monuments on Commonage land are not eligible for this action. Monuments in farmyards are not eligible for payment in this action.

### There are two options:

1. Establish and maintain a buffer margin around a visible archaeological monument in a tillage parcel(s).
2. Managing vegetation around a visible archaeological monument in an eligible grassland parcel(s).

### **Option 1: Establish and maintain a buffer margin around a visible monument in a tillage parcel(s)**

The aim of this option is to create a buffer margin to protect and maintain visible archaeological monuments in a tillage field. If you have monuments on a tillage parcel(s) and you take this action, you must take Option 1 i.e. put in place a grass margin.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Arable Grass Margin, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, Low Emission Slurry Spreading, Planting a Grove of Native Trees, Planting New Hedgerow, Rare Breeds, Traditional Dry Stone Wall Maintenance and Traditional Orchards.**

**Requirements:**

|     |  |
|-----|--|
| 1.  | Establish a 10- <b>metre-wide</b> grass margin by sowing a grass seed mix by 31 <sup>st</sup> May 2016.  |
| 2.  | The action must be delivered on a LPIS parcel(s). The monument(s) must be clearly identified on the map accompanying your GLAS application.  |
| 3.  | The minimum number of monuments is 1.  |
| 4.  | The margin must extend from the external outer boundary of the monument. The margin must be established by light cultivation techniques – i.e. no ploughing is permitted.  |
| 5.  | Soil cultivation or tractor operations cannot be carried out within the margin once established.   |
| 6.  | The margin must be maintained by hand mowing or strimming throughout the year and for the duration of the contract.  |
| 7.  | Grazing by livestock is permitted provided that no damage is caused to the monument.   |
| 8.  | Pesticides are not permitted, except for spot treatment of noxious and invasive weeds (see appendix 16).   |
| 9.  | Where there is encroaching vegetation (excluding established healthy trees) on/near the monument, this must be controlled but not between 1 <sup>st</sup> March and 31 <sup>st</sup> August annually. Note roots of plants cannot be removed. Further detail on this is set out in option 2 below. |
| 10. | <b>Continue the requirements as listed above for extension period.</b>   |

**Option 2: Managing vegetation around a visible archaeological monument in an eligible grassland parcel(s)**

The aim of this option is to control certain types of re-seeded or quickly colonising trees and invasive woody plants and other problematic plants around a visible archaeological monument.

Note: Any proposed works to a Recorded Monument that involves digging/ ground disturbance must be notified in advance to the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht for their consideration.

Note: Care must also be taken to ensure that the proposed treatment of trees and/or other plant species, i.e. felling, lopping, coppicing, pollarding, pruning, cutting, thrashing or spraying is consistent with the provisions of the Forestry Act 1946.

Note: Under no circumstances should burning take place on or near the monument, as this can also cause damage to underlying archaeological deposits.

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds – Breeding Waders, Cough, Corncrake, Geese and Swans, Hen Harrier, Twite (A & B), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Planting a Grove of Native Trees, Planting New Hedgerow, Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP and Traditional Orchards.**

|            |   |
|------------|---|
| <b>1.</b>  | Manage vegetation on or around a visible monument.  |
| <b>2.</b>  | The action must be delivered on a LPIS parcel(s). The monument(s) must be clearly identified on the map accompanying your GLAS application.   |
| <b>3.</b>  | Minimum number of monuments is 1.   |
| <b>4.</b>  | Remove all encroaching vegetation (excluding established healthy trees) on/near the monument. Roots of plants cannot be removed.  |
| <b>5.</b>  | All works should be done with hand tools (e.g. with a saw, slash hook, secateurs and/or pruning shears) or motor-manually (e.g. with a chainsaw/brush cutter/trimmer). Tractors or diggers cannot be used to cut or remove vegetation.  |
| <b>6.</b>  | Small trees and plants like gorse, whins, rhododendron, laurel and other individual plants should be removed by cutting at the base and treating the stump with an appropriate herbicide to prevent re-growth.                          |
| <b>7.</b>  | Larger trees should be pruned to above head height to open up access to the site or monument. Pollarding of trees is allowed.   |
| <b>8.</b>  | Management of vegetation must NOT be carried out between 1st March and 31st August annually. The one exception to this rule is the cutting or thrashing (flailing) of bracken and ferns which can be carried out in the middle of June. |
| <b>9.</b>  | Remove dead or unstable trees: Cut as close as possible to ground level, leave stump in place and replace root plate in the existing depression.  |
| <b>10.</b> | Felled or dead trees must be cut into pieces where they fall, and the pieces taken away.  |
| <b>11.</b> | Strim ground cover within 3 metres of the exterior of the monument.   |

|     |  |
|-----|--|
| 12. | The killing or removal of well-established ivy or trees, whose root systems have invaded the fabric of masonry structure, is not permitted.  |
| 13. | Spot treatment of herbicides is permitted. All herbicides must be systemic.  |
| 14. | Any fallen masonry discovered during work must be left untouched.  |
| 15. | New shoots of woody plants which become established in the walls of the structure must be removed provided this does not damage or de-stabilise the monument.  |
| 16. | The interior of the monument must be inaccessible to livestock. Grazing by livestock throughout the year is permissible but care should be taken in the autumn and winter months to ensure no damage is caused to the monument.                  |
| 17. | Place angular boulders at the base of the corner of the structure to prevent livestock from rubbing against the monument.  |
| 18. | A vegetation maintenance regime should be put in place in relation to the structure, to ensure that new vegetation does not take hold within the structure, in the absence of grazing. This should not involve any degree of ground disturbance. |
| 19. | Monuments must be monitored regularly after clearance to prevent regeneration.   |
| 20. | <b>Continue the requirements as listed above for extension period.</b>   |

### Recommendations:

In order to prevent damage to the site or monument through ground disturbance and to avoid causing a sudden loss of habitat, it is best to make a number of small interventions over a number of years rather than to do the work in one single episode. For example, berry-bearing trees are an important food source in the winter months for birds. Gorse, briars and high grasses may shelter ground-nesting birds, whilst bracken can be home to other rare plant species, invertebrates and small mammals.

In the case of bracken, the ideal method is the manual cutting and crushing of growing fronds which causes the gradual starvation of the rhizome system. Cutting or thrashing is best done around the middle of June and again six weeks later for at least three successive years.

## **Protection of Watercourses from Bovines**

### **Objective:**

To protect water quality by excluding bovines from watercourses.

### **Background:**

Livestock grazing along a watercourse can lead to direct pollution of water with urine and faeces which could mean pathogens entering the water. This can destroy aquatic habitats and lower the quality of water that could potentially enter the water that humans use. Excluding bovines from watercourses will prevent the breakdown of vegetation on the banks of the watercourse. It will also prevent pollution of the watercourse from bovines

Note: Tier 1 applicants in high status water sites must select this action.

Applicants with vulnerable water status sites must select this action to become eligible as a Tier 2 (a) applicant. Watercourses on commonage and/or non-contract lands are not eligible for this action and do not have to be fenced. All watercourses are identified and marked on the GLAS online mapping system. Lakes are not eligible watercourses for this action.

Note: To be eligible for this action, participants must have had bovines on their holding in 2013 and for the duration of the GLAS contract and all grass fields contiguous to the watercourse(s) must be fenced for the duration of the contract on all parcels you are seeking GLAS payment on.

Parcel(s) chosen for the Protection of Watercourses from Bovines action must remain in grass for the period of the contract. Any tillage fields on these holdings which are contiguous to the watercourse and are converted to grass during the GLAS contract must be fenced if livestock are ever in the parcels. If a farmer comes into GLAS through an action other than High Status Water Sites or Vulnerable Status Water Sites as they don't have bovines at the time of entering GLAS; they must fence all watercourses in future years should there be bovines on the holding during the period of the GLAS contract.

Note: If the watercourse is in a designated SAC and fencing is not allowed by the National Parks and Wildlife Service this action cannot be selected as a general action.

**If you select this action the only other actions you can select on this LPIS parcel are:**

Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds - Breeding Waders, Chough, Corncrake, Geese and Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (grassland), Rare Breeds, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP and Traditional Orchards.

**Requirements:**

|    |   |
|----|---|
| 1. | Participants must have had bovines on their holding in 2013 and retain them for the duration of the GLAS contract. Bovines must be owned.     |
| 2. | Fence off watercourse(s) on GLAS contract lands.  |
| 3. | The LPIS parcels selected must be marked on the map submitted.  |
| 4. | All watercourses must be fenced a minimum of 1.5 metres from the top of the bank of the watercourse to exclude bovines by 31st December 2015. |
| 5. | The fencing must be stockproof, fit for purpose and be undertaken with permanent stakes.  |
| 6. | Livestock drinking points are not permitted. An alternative water supply must be provided for livestock.                                      |
| 7. | <b>Maintenance must be carried out on the fence and replacement stakes installed if required during the extension period.</b>                 |
| 8. | <b>Continue the requirements as listed above for extension period.</b>  |

Note: Where the fencing of watercourses from bovines was a priority action, and a derogation was approved by Johnstown Castle not to fence the watercourse on parcels with breeding waders and/or Geese and Swans, the participant will remain eligible for GLAS but will receive no payment for the fencing of watercourse action for the lengths concerned within the derogation.

**GLAS participants applying for a Nitrates Derogation will not be eligible for a GLAS payment for this action from 2021 onwards, regardless of whether stocking rate exceeds 170KgN/ha.**

**GLAS participants operating at a grassland stocking rate of 170 kg (or above) nitrogen per hectare from livestock manure are ineligible for a GLAS payment for this action from 1st January 2021 onwards.**

## Rare Breeds

### Objectives:

Retain and where possible increase populations of specific rare breeds to ensure long term survival of the breeds.

Note: Priority entry is only available to those who have been registered with a relevant breed society and have registered livestock with the relevant breed society in 2012 and/or 2013.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese & Swans, Grey Partridge, Hen Harrier, Twite (ABC), Catch Crops WP & PP, Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Input Permanent Pasture WP & SP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection of Archaeological Monuments (Grassland), Protection of Archaeological Monuments (Tillage), Protection of Water Courses from Bovines, Traditional Dry Stone Wall Maintenance, Traditional Hay Meadow WP & PP, Traditional Orchards and Wild Bird Cover WP & PP**

### Eligible livestock species:

| <b>Cattle</b>                               | <b>Horses and Ponies</b>                          | <b>Sheep</b> |
|---|---|--------------|
| Kerry<br>*Dexter<br>*Irish Maol (or Moiled) | Connemara Pony<br>Irish Draught<br>Kerry Bog Pony | Galway       |

**\* The continued eligibility of the UK Dexter Cattle Society and the Irish Moiled Cattle Society for the extension period is subject to the outcome of Brexit negotiations and further consideration. Clarification will be provided in due course.**

Note: The maximum number of livestock units that can be claimed for annual payment is 10.

Payment will be made in arrears based on the monthly average livestock units of owned registered animals over the previous recording year.

Livestock units for consideration for payment are calculated as follows:

|                              |         |
|------------------------------|---------|
| Bovines 6 months to 2 years  | 0.6 LU  |
| Bovines over 2 years         | 1.0 LU  |
| Equines over 6 months of age | 1.0 LU  |
| Ewe (+/- Lambs at foot)      | 0.15 LU |
| Ewe Lamb (6 months - 1 year) | 0.10 LU |
| Ram                          | 0.15 LU |

Note: The above livestock unit equivalents apply when an animal is kept for a full year.

Livestock Passports and where applicable pedigree certificates must be in participants own name.

**Requirements:**

Participants must:

|    |   |
|----|---|
| 1. | <b>Be a member of an approved breed society for the period of the contract.</b>   |
| 2. | Register all progeny from a purebred mating with the relevant breed society where they are seeking a GLAS rare breed payment on the animal. |
| 3. | Maintain an up-to-date monthly record of all registered animals owned by you.   |
| 4. | Record all animals on the Rare Breeds Record Sheet.   |
| 5. | <b>Continue the requirements as listed above for extension period.</b>  |

**Documents required for payment:**

|    |  |
|----|--|
| 1. | <b>Registration and identification certificates for each registered animal.</b><br><b>No original documentation, certified copies only to be submitted annually.</b> |
| 2. | A copy of the completed Rare Breeds Records.   |

### Requirements for the different types of livestock:

#### Bovines:

|    |   |
|----|---|
| 1. | All females 6 months to 2 years of age will be considered for payment.  |
| 2. | <b>An adult female(s) (over 2 years of age) must be mated to a purebred male of the same breed at each mating. Breeding females must produce registered offspring before the end of the contract, otherwise there will be full clawback</b> |
| 3. | All bulls 6 months to 2 years of age will be considered for payment.  |
| 4. | <b>Bulls greater than 2 years of age up to a maximum of 1 bull per 5 cows will be considered for payment.</b>   |

#### Equines:

|    |   |
|----|---|
| 1. | All equines must have a passport.   |
| 2. | All registered females and entire males between 6 months and 3 years of age will be considered for payment.   |
| 3. | <b>An adult female (s) (over 3 years of age) must be mated to a purebred male of the same breed at each mating. Breeding females must produce registered offspring before the end of the contract, otherwise there will be full clawback.</b> |
| 4. | Entire adult males greater than 3 years of age up to a maximum of 1 stallion per 5 mares will be considered for payment.  |

#### Sheep:

|    |   |
|----|---|
| 1. | All females over 6 months of age will be considered for payment.  |
| 2. | <b>An adult female (s) (over 1 year of age) must be mated to a purebred male of the same breed at each mating. Breeding females must produce registered offspring before the end of the contract, otherwise there will be full clawback</b> |
| 3. | Males under 1 year of age are not eligible for payment.   |
| 4. | Males over 1 year of age will be considered for payment up to a maximum of 1 ram per 5 adult ewes.  |

#### Further information:

For a list of Rare Breed societies – see Appendix 12.

## Riparian Margins

### Objectives:

Protect watercourses by creating linear buffer zones.

### Background:

Our watercourses are an important natural resource that need protection from pollution and degradation. Livestock grazing in the riparian zone can lead to direct pollution of water with urine and faeces which can lead to pathogens entering the water. This can destroy aquatic habitats and lower the quality of water that could be used for human consumption. Riparian margins will stabilise riverbanks and intercept nutrients transported in overland flow.

Notes: You can only select this action if you have watercourses on your land. Watercourses on commonage land are not eligible for this action. All watercourses are identified and marked on the GLAS online mapping system. Riparian margins are only eligible in grassland parcels. Lakes are not eligible watercourses for this action.

If the watercourse is in a designated SAC and fencing is not allowed by the National Parks and Wildlife Service this action cannot be selected.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (grassland), Traditional Dry Stone Wall Maintenance and Traditional Orchards.**

### Requirements:

|           |   |
|-----------|---|
| <b>1.</b> | Establish a 3, 6, 10 or 30 metre riparian margin by fencing it off by the 31 <sup>st</sup> March 2016. An access point for machinery into the margin must be kept to keep it eligible. Livestock are not permitted to graze the margin from the time of its establishment until the end of the GLAS contract. |
| <b>2.</b> | Identify the location of the riparian margin on the LPIS parcel selected and mark on the map submitted with your GLAS application.  |
| <b>3.</b> | Participants can choose different Riparian Margin widths within the same LPIS parcels but   |

|    |  |
|----|--|
|    | only on different/separate field boundaries.   |
| 4. | Margin width is measured from the top of the bank or the edge of vegetation (if scrub is present) into the field.  |
| 5. | The margin must be mulched or mown at least once per year but not between 1 <sup>st</sup> March and the 15 <sup>th</sup> August each year. Offtakes are allowed. |
| 6. | Fertilisers cannot be applied.   |
| 7. | Pesticides are not permitted, except for spot treatment of noxious and invasive weeds.   |
| 8. | <b>Continue the requirements as listed above for extension period.</b>   |

## Traditional Dry Stone Wall Maintenance

### Objective:

To maintain and enhance the network of traditional freestanding dry stone walls, increase biodiversity and enhance the visual landscape.

### Background:

Stone walls are an important feature in the landscape. Walls offer shelter to livestock, protection to wildlife and are an important habitat for both flora and fauna. Dry stone walls are walls built using stones that sit comfortably without the use of mortar and constructed in a style traditional to the locality. Where the GLAS participant is also in the Burren Farming for Conservation Programme and is in receipt of the stone wall payment, they are not eligible for this action.

### ***If you select this action the only other actions you can select on this LPIS parcel are:***

**Arable Grass Margins, Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Farmland Birds – Breeding Waders, Chough, Corncrake, Geese and Swans, Grey Partridge, Hen Harrier, Twite (A,B,C), Catch Crops WP, Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Low Input Permanent Pasture WP, Minimum Tillage, Planting a Grove of Native Trees, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins, Traditional Hay Meadow WP and Traditional Orchards**

Note: Stone walls entered for this action must be accessible and visible for maintenance. Walls with scrub on or against them are not eligible for payment. External farm stone walls entered for this action are payable at half rate except for external stone walls that front onto a public roadway, private laneway or waterbody where the farmer has control over both sides of the wall for maintenance. Internal wall lengths can only be counted once and must be maintained on both sides.

A stone wall that bounds a farmyard is eligible for payment at the full rate provided the participant has control of both sides of the wall for maintenance.

**Requirements:**

|    |   |
|----|---|
| 1. | Maintain traditional freestanding dry stone walls by replacing stones that may have fallen off the top of the wall or repair walls if/where stones have fallen down. Walls that have fallen or partly collapsed must be rebuilt in the same style as other walls in the locality. <u>Walls built with mortar are not eligible for the action.</u> |
| 2. | The location and length (metres) must be identified on the LPIS plot(s) and marked on the map submitted.  |
| 3. | The minimum amount of stone wall for maintenance is 10 m and this must be in a single continuous length.  |
| 4. | A maximum of 4,000 metres on the holding.   |
| 5. | All walls entered for this action must be maintained from the commencement of the contract to the end of the GLAS contract <b>including the extension period.</b>   |
| 6. | <b>Continue the requirements as listed above for extension period.</b>  |

## Traditional Hay Meadow

### Objective:

To promote the maintenance of a traditional method of forage conservation that is beneficial to grassland flora and fauna.

Note: Where the Traditional Hay Meadow is situated within a designated Natura 2000 site, farmers can choose to be paid for this action, rather than Natura once the parcel complies with the Traditional Hay Meadow Specification and they comply with the Natura designation.

Farmers who apply for a Nitrates Derogation in any year of the GLAS contract will be ineligible for this action. There will be clawbacks of any Traditional Hay Meadow payment made to date.

**This action is separated into whole parcel (WP) and part parcel (PP)**

### Traditional Hay Meadow WP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Farmland Habitat (Private Natura), Laying of Hedgerows, Low Emission Slurry Spreading, Protection of Archaeological Monuments (Grassland), Protection of Watercourses from Bovines, Rare Breeds and Traditional Dry Stone Wall Maintenance.**

### Traditional Hay Meadow PP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Catch Crops PP, Low Emission Slurry Spreading, Low Input Permanent Pasture PP, Rare Breeds and Wild Bird Cover PP.**

### Requirements:

|           |  |
|-----------|--|
| <b>1.</b> | Select a suitable Traditional Hay Meadow where the entire area of the full parcel or part parcel (see 3 below) can be mowed with a tractor mower.                      |
| <b>2.</b> | The maximum area payable is 10ha of Traditional Hay Meadow and/or Low Input Permanent Pasture.   |
| <b>3.</b> | This action can be delivered on a full or split LPIS grassland parcel. Where the action is on a split parcel it must be digitised out and marked on the map submitted. |

|     |  |
|-----|--|
| 4.  | Selected LPIS parcels must not have been cultivated in the last 8 years and must have been declared as forage on the SPS for the previous 8 years.   |
| 5.  | The meadow must contain a minimum of three grass species such as cocksfoot, timothy, bentgrasses, fescues, sweet vernal, Yorkshire fog, etc. (excluding Ryegrasses) that are widely dispersed throughout the LPIS parcel. Where Ryegrasses are present, they must not occupy more than 50% of the sward. |
| 6.  | Maximum chemical nitrogen usage is 40 kg N per ha per annum.   |
| 7.  | Grazing cannot take place from the 15 <sup>th</sup> April until the meadow is mown annually which must be after the 1 <sup>st</sup> July.  |
| 8.  | Topping cannot take place from the 15 <sup>th</sup> March until after the meadow is mown annually.   |
| 9.  | Supplementary meal feeding may take place on these parcels provided meal troughs are moved to avoid poaching. Where the parcel is a Natura parcel, the GLAS advisor and participant should ensure that the supplementary feeding of meal does not impact negatively on the Natura site.                  |
| 10. | Where present, rushes must be controlled either mechanically by weed wiping and/or by spot spraying. While weed wiping and/or spot spraying can take place between 15 <sup>th</sup> March and when the meadow is mown annually, topping to control rushes cannot take place between these dates.         |
| 11. | <b>Continue the requirements as listed above for extension period.</b>   |

Recommendation: Where, because of bad weather or for other reasons, hay cannot be saved, silage can be made, provided that it is turned at least twice before collecting.

Note: In GLAS there will be no cross compensation allowed between Low Input Permanent Pasture and Traditional Hay Meadows. Therefore, if a farmer commits to deliver 5 hectares of Low Input Permanent Pasture and 5 hectares of Traditional Hay Meadow, they must deliver 5 hectares of each i.e. they cannot deliver 6 hectares of Low Input Permanent Pasture and 4 hectares of Traditional Hay Meadow.

## Traditional Orchards

### Objective:

Increase biodiversity and provide a habitat for wildlife on the farm.

### Background:

To ensure the survival of old fruit varieties and to enhance the visual and historical value of the landscape.

### **If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Coppicing of Hedgerows, Laying of Hedgerows, Planting New Hedgerow, Protection and Maintenance of Archaeological Monuments (tillage), Protection and Maintenance of Archaeological Monuments (grassland), Protection of Watercourses from Bovines, Rare Breeds, Riparian Margins and Traditional Dry Stone Wall Maintenance.**

### Requirements:

|    |   |
|----|---|
| 1. | Plant 10 fruit trees in the dormant season (October to March) before the 31 <sup>st</sup> March 2016.   |
| 2. | This action must be delivered on a full LPIS parcel. LPIS parcel selected must be marked on the map submitted.  |
| 3. | The minimum area is 0.05 ha and trees must be spaced with a radius of 7 meters apart.   |
| 4. | Choose varieties from Appendix 5.   |
| 5. | Trees must be supported with a suitable stake and secured with a suitable tie.  |
| 6. | Trees must be protected from livestock and the orchard fenced off. However, grazing with sheep is permitted provided that no damage is caused to the trees. If damage is being caused by rabbits/hares, measures to prevent further damage must be taken by the erection of a rabbit-proof fence. |
| 7. | Failed or dead trees must be replaced during the next planting season.  |
| 8. | Pesticides are not permitted, except for spot treatment of noxious and invasive weeds.  |
| 9. | <b>Continue the requirements as listed above for extension period.</b>  |

Recommendation: Trees must be on their own roots or grafted onto vigorous rootstocks (MM106 or MM111)

**Further information:**

<http://www.mrmiddleton.com/apple>,

[www.irishseedsavers.ie](http://www.irishseedsavers.ie)

## Wild Bird Cover

### Objective:

To sow a seed crop mix that provides a food source and winter cover for farmland birds and other fauna.

### Background:

Wild Bird Cover is a spring-sown crop that is left unharvested over winter to provide food for farmland birds.

**This Action is Separated into whole parcel (WP) and part parcel (PP)**

### Wild Bird Cover WP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Bat Boxes, Bird Boxes, Conservation of Solitary Bees (Boxes/Sand), Low Emission Slurry Spreading and Rare Breeds**

### Wild Bird Cover PP

**If you select this action the only other actions you can select on this LPIS parcel are:**

**Catch Crops PP, Environmental Management of Fallow Land PP, Low Emission Slurry Spreading, Low Input Permanent Pasture PP, Rare Breeds and Traditional Hay Meadow PP**

### Requirements:

|           |   |
|-----------|---|
| <b>1.</b> | Successfully establish a wild bird cover crop by sowing a suitable seed mix as set out below by 31 May annually   |
| <b>2.</b> | This action can be delivered on a full or split LPIS parcel. Where the action is on a split parcel it must be digitised out and marked on the map submitted with the GLAS application. The Wild Bird Cover must remain in the same place for the duration of the GLAS contract. |
| <b>3.</b> | The minimum area is 1 ha where it is taken as a priority action and 0.25 ha where it is taken as a general action and maximum area for payment is 3 ha. The minimum parcel size is 0.25 of a hectare.   |
| <b>4.</b> | Parcels selected must be capable of producing a crop.   |
| <b>5.</b> | Crop must remain in situ until 15 <sup>th</sup> of March the following year. In the year in which   |

|            |  |
|------------|--|
|            | parcels have been fully replanted, livestock may enter the parcel from 15 <sup>th</sup> March to planting time, to aid in the decomposition of the trash.  |
| <b>6.</b>  | The 1 year mix must contain a cereal (either oats or triticale) and at least one species from the following: oilseed rape, linseed and mustard. The two year mix must contain a cereal (either oats or triticale) and kale. Where the 2 year mix is sown, half the plot is sown with cereal and half the plot is sown with kale. Do not sow it in alternative strips, as the cereal must be resown in year 2 while the kale will be remaining in situ. |
| <b>7.</b>  | Drilling is the preferred sowing method; however, broadcasting of the seed is permitted. If broadcasting, <b>increase the seed rates by between one third</b> (for smaller seeds) and a <b>half</b> (for larger seeds), and roll immediately post sowing.  |
| <b>8.</b>  | Pre-sowing weed control can be used.   |
| <b>9.</b>  | Pesticides cannot be applied post sowing. However, spot treatment with herbicide for noxious weeds and invasive species is permitted.  |
| <b>10.</b> | Parcel(s) must be fenced off and stock proof from the time the crop is sown until to the 15 <sup>th</sup> of March of the following year.  |
| <b>11.</b> | Fertiliser can be applied at a maximum of half rate for a cereal crop prescribed in Statutory Instrument 31 of 2014 <b>(SI 605/2017) (SI 65/2018) (SI 40/2020)</b> .   |
| <b>12.</b> | No harvesting can take place.  |
| <b>13</b>  | <b>Continue the requirements as listed above for extension period.</b>   |

### Recommendations

Consideration should be given to growing the crop adjacent to cover (e.g. beside hedgerows or near woodland or scrub). This may also be grown along a stream or river where it can have the dual benefit of acting as a buffer margin.

### Examples:

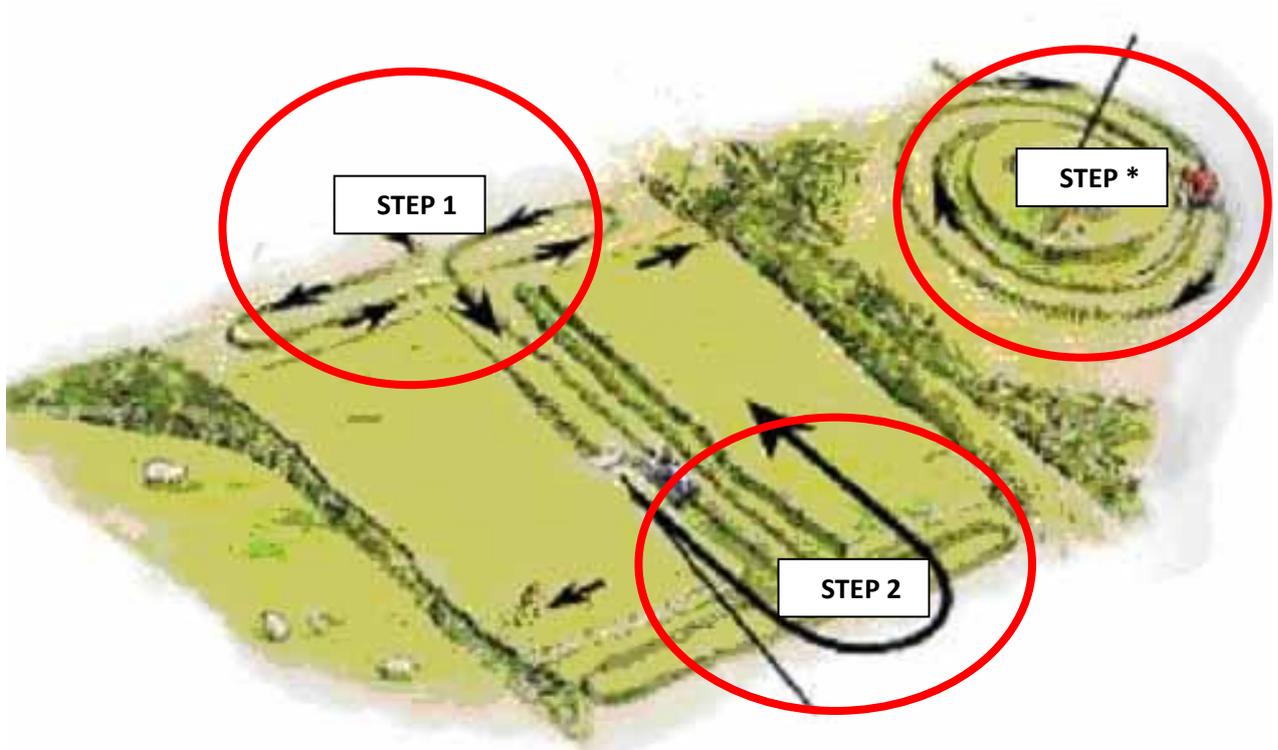
Example 1: One year seed mixes that can be planted annually – can be mixed together.

| <b>Seed mix</b>            | <b>Seeding rate where drilled</b>                 |
|----------------------------|---|
| Oats and Linseed           | 75 kg/ ha of oats and 15 kg/ha of linseed         |
| Oats and Mustard           | 75 kg/ha of oats and 10 kg/ha of mustard          |
| Triticale and Linseed      | 75 kg/ha of triticale and 15 kg/ha of linseed     |
| Triticale and Oilseed Rape | 75 kg/ha of triticale and 3 kg/ha of oilseed rape |

**Example 2:** Two Year see mixes must be planted separately beside each other in the one plot.

| <b>Year</b>   | <b>Seed mix</b>  | <b>Seeding rate where drilled</b>                 |
|---------------|--|---|
| Year 1        | Establish half the plot with cereal crop and half with kale                                  | 75 kg/ ha of oats / triticales<br>3 kg/ha of kale |
| Year 2        | Kale remains in situ and re-establish cereal crop in half of plot                            | 75 kg/ha of oats/triticales                       |
| Year 3        | Re-establish half of plot as kale and half of plot as cereal                                 | 75 kg/ha of oats/triticales<br>3 kg/ha of kale    |
| Year 4        | Kale remains in situ in half the plot and re-establish half of plot with cereal crop         | 75 kg/ha of oats/triticales                       |
| Year 5        | Re-establish half as kale and half as cereal   | 75 kg/ha of oats/triticales<br>3kg/ha of kale     |
| <b>Year 6</b> | <b>Kale remains in situ in half the plot and re-establish half the plot with cereal crop</b> | <b>75kg/ha of oats/triticales</b>                 |
|               | <b>For any subsequent years – follow the rotation as outlined above</b>                      |   |

## Appendix 1a: 'Centre Out' mowing method

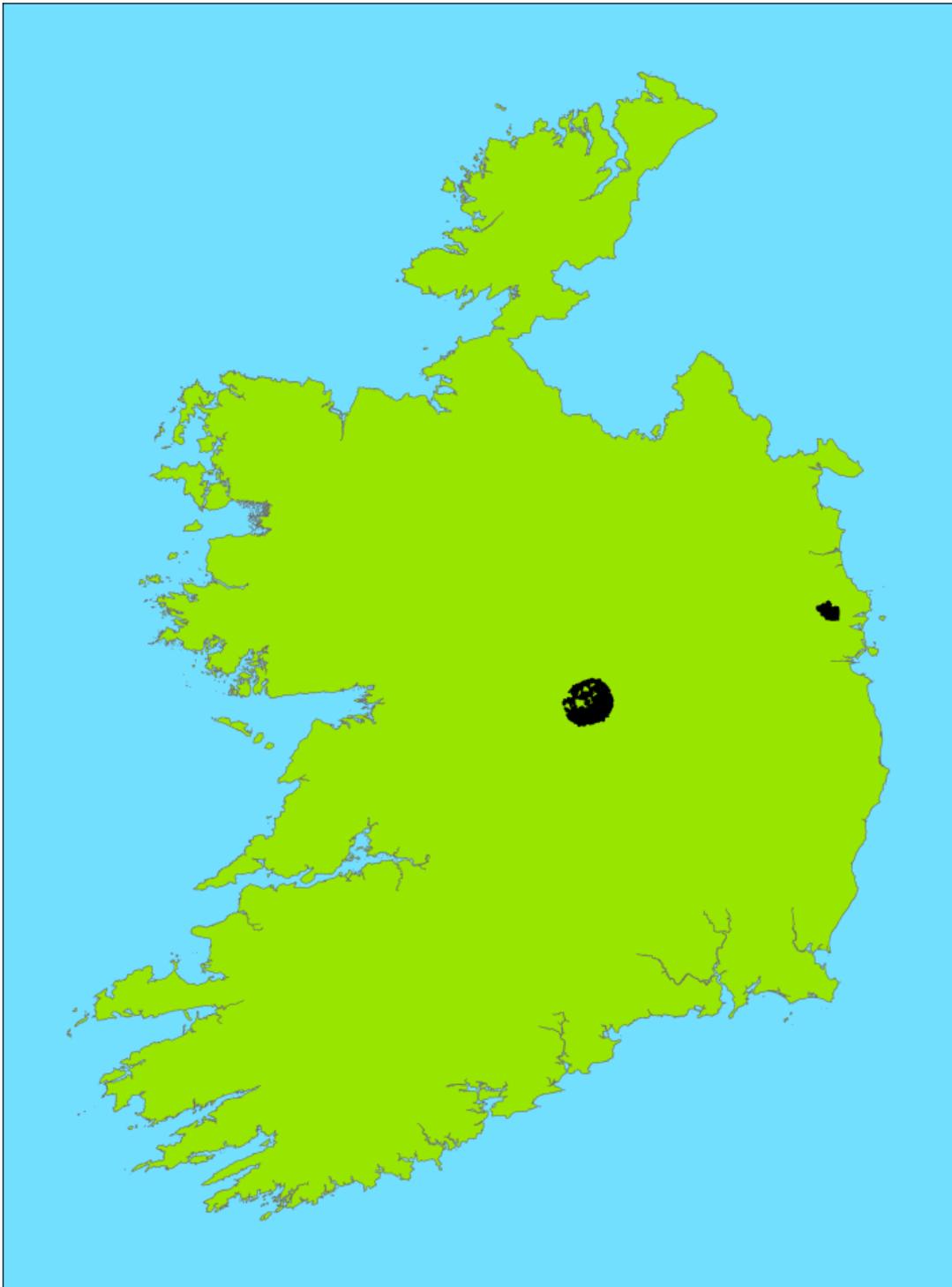


**STEP 1:** Mow the two ends of the field parcel.

**STEP 2:** Mow the remainder of the field from the centre out in a slow (low gear) manner.

**STEP \*:** If present, mow towards rocky knoll to leave a sizeable refuge.

**Appendix 1b: Grey Partridge eligible land areas**



**Appendix 1c: Twite eligible land areas.**

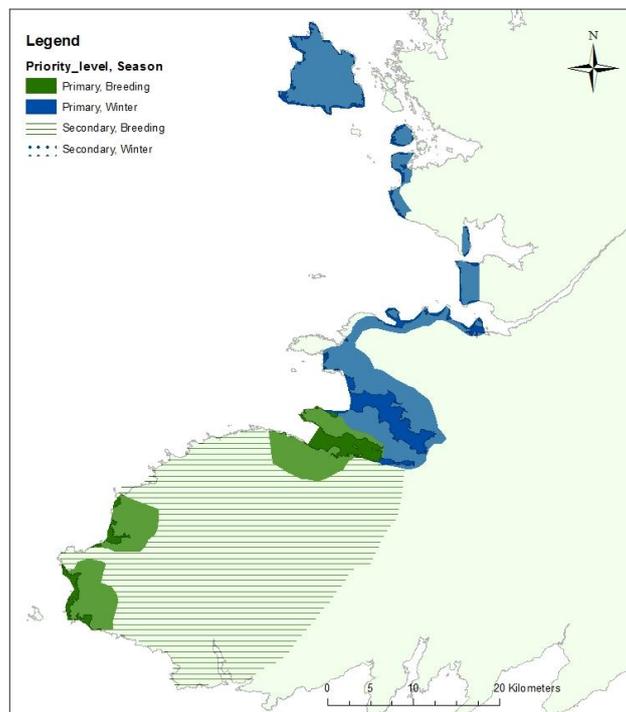


Figure 1: Primary and secondary target areas for Twite birds County Donegal

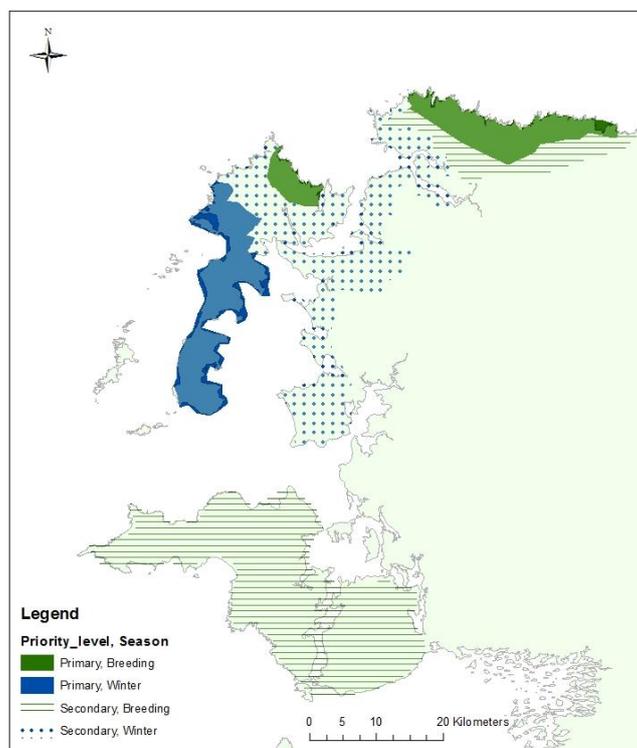


Figure 2: Primary and secondary target areas for Twite birds County Mayo.

**An Roinn Talmhaíochta,  
Bia agus Mara**  
Department of Agriculture,  
Food and the Marine



**Eastát Chaisleáin Bhaile Sheáin, Co. Loch Garman, Y35 PN52**

Johnstown Castle Estate, Co Wexford, Y35 PN52

T +353 53 9163400; Lo Call 0761 06 4415

**[www.gov.ie/agriculture](http://www.gov.ie/agriculture)**



**The European Agricultural Fund  
for Rural Development:  
Europe investing in rural areas**



## Appendix 2: Interaction between Organic Farming Scheme (OFS) and GLAS

|  |   |
|--|---|
| Arable Grass Margins   | Allowed along with OFS payment  |
| Bat Nest Boxes   | Allowed along with OFS payment  |
| Bird Nest Boxes  | Allowed along with OFS payment  |
| Conservation of Solitary Bees (Boxes)                                      | Allowed along with OFS payment  |
| Conservation of Solitary Bees (Sand)                                       | Allowed along with OFS payment  |
| Breeding Waders  | Allowed but only where OFS payment forgone for that area  |
| Chough   | Allowed but only where OFS payment forgone for that area  |
| Corncrake  | Allowed but only where OFS payment forgone for that area  |
| Geese and Swans  | Allowed but only where OFS payment forgone for that area  |
| Grey Partridge   | Allowed but only where OFS payment forgone for the LPIS Parcel within which the Grey Partridge margin is located                              |
| Hen Harrier  | Allowed but only where OFS payment forgone for that area  |
| Twite A  | Allowed but only where OFS payment forgone for that area  |
| Twite B  | Allowed but only where OFS payment forgone for the LPIS Parcel within which the Twite B margin is located                                     |
| Twite C  | Allowed but only where OFS payment forgone for that area  |
| Catch Crops  | Allowed along with OFS payment  |
| Commonage Management Plan  | Allowed along with OFS payment as no payment for commonage in OFS   |
| Coppicing of Hedgerows   | Allowed along with OFS payment  |
| Environmental Management of Fallow Land                                    | Allowed but only where OFS payment forgone for the LPIS Parcel  |
| Farmland Habitat (Private Natura)  | Allowed along with OFS payment  |
| Laying of Hedgerows  | Allowed along with OFS payment  |
| Low Emission Slurry Spreading  | Allowed along with OFS payment  |
| Low Input Permanent Pasture  | Allowed, but only where OFS payment forgone for that area   |
| Minimum Tillage  | Allowed along with OFS payment  |
| Planting a Grove of Native Trees   | Allowed, but only where OFS payment forgone for that area   |
| Planting New Hedgerow  | Allowed along with OFS payment  |
| Protection and Maintenance of Archaeological Monuments (Tillage Parcels)   | Allowed along with OFS payment Allowed but only where OFS payment is forgone for the LPIS Parcel within which the tillage monument is located |
| Protection and Maintenance of Archaeological Monuments (Grassland Parcels) | Allowed along with OFS payment  |
| Protection of Watercourses from Bovines                                    | Allowed along with OFS payment  |
| Rare Breeds  | Allowed along with OFS payment  |
| Riparian Margins   | Allowed but only where OFS payment is forgone for the LPIS Parcel within which the riparian margin is located                                 |
| Traditional Dry Stone Wall Maintenance                                     | Allowed along with OFS payment  |
| Traditional Hay Meadow   | Allowed, but only where OFS payment forgone for that area   |
| Traditional Orchards   | Allowed along with OFS payment  |
| Wild Bird Cover  | Allowed, but only where OFS payment forgone for that area   |



### Appendix 3: Approved Native Hedgerow Species

Choice of Hedgerow species that **MUST** be planted in the Planting New Hedgerow Action, Coppicing of Hedgerow action and/or Laying of Hedgerow Action.

| Species   | Characteristics   |
|---|---|
| <p><b>Blackthorn</b><br/><i>Prunus spinosa</i></p>                    | <p>Grows well on heavy and sandy soils. Salt tolerant, suitable for coastal and exposed situations. Quick growing shrub, forming an impenetrable stockproof barrier when well established. Throws out root suckers requiring regular management. Excellent plant for gapping hedgerows. Stands up well to cutting. Can be propagated from rooted suckers. Tends to become bare at the base.</p>   |
| <p><b>Holly</b><br/><i>Ilex aquifolium</i></p>                        | <p>Grow on clay soils, sands and gravel. Very tolerant of shade. Will not grow on wet sites. Both male and female plants are required to produce berries. Slow growing evergreen with high amenity value. Forming a tough stockproof barrier. Good plant for gapping. Susceptible to frost damage.</p>  |
| <p><b>Whitethorn<br/>(Hawthorn)</b><br/><i>Crataegus monogyna</i></p> | <p>Tolerant of most soils except where very wet. Does not thrive at high elevations. Susceptible to Fire Blight disease; should not be planted near tree/shrub nurseries or commercial orchards Ubiquitous native hedge plant tough, hardy and fast growing. Withstands hard cutting and lying. Displays great variation in flower hue at blossom time. An important source of pollen and nectar for invertebrates; major bee forage plant.</p> |

## Appendix 4: Native Irish trees for Planting a Grove of Native Trees

| Species   | Characteristics  | Remarks  |
|---|--|--|
| <b>Alder</b><br>( <i>Alnus glutinosa</i> )  | Suitable for wet sites.<br>Fast growing nitrogen-fixing tree. Suitable broadleaf for even the wettest sites.   | Minor forest species. Common Alder is a native tree. Coppices freely and can be used in mixtures on less fertile sites. Valuable shelter tree                |
| Silver birch<br>( <i>Betula pendula</i> ),<br><b>Downy birch</b><br>( <i>Betula pubescens</i> ) | Pioneer species suited to very acid soils and peats.<br>Fast growing, hardy species, withstands exposure and frost well. Useful as a nurse crop in mixtures but must be kept under control or it will smother a slower growing tree species              | Very attractive small tree.<br>Minor forest species. Native tree. Young trees coppice freely. May be used as a soil improver. Can be mixed into shelterbelts |
| Sessile oak<br>( <i>Quercus petraea</i> ),<br>Pedunculate oak ( <i>Quercus robur</i> )          | Well-aerated deep fertile loams. Will grow well on heavier soils<br>Slow growing, long lived tree.   | Major forest species. One of our few native broadleaved trees. Very high amenity and wildlife value  |
| <b>Mountain ash</b><br>( <i>Sorbus aucuparia</i> )  | Suitable for lowland and hill acidic sites. Will tolerate even alkaline sites<br>Hardy tree suitable for exposed sites. Widely used amenity tree   | Minor forest species. Native tree. Offers good support for wildlife  |
| <b>Whitebeam</b><br>( <i>Sorbus aria</i> )  | Most fertile mineral soils.<br>Attractive amenity tree also suitable for shelter   | Minor forest species. Native tree. Tolerant of exposed and coastal sites   |
| <b>Wild Cherry</b><br>( <i>Prunus avium</i> )   | Fertile deep well-drained mineral soils. Preference for slightly acid soils but will do well on deep loams over limestone.<br>Fast growing, light demanding, requiring considerable space. The only commercial broadleaved tree with attractive blossoms | Major forest species. Native tree. May suffer from bacterial canker and aphid attack   |

|  |   |  |
|--|---|--|
| <p><b>Goat willow</b><br/>(<i>Salix caprea</i>),<br/>rusty willow<br/>(<i>Salix cinerea</i><br/>subsp.<br/><i>oleifolia</i>), eared<br/>willow (<i>Salix</i><br/><i>aurita</i>) and<br/>white willow<br/>(<i>Salix alba</i>)</p> | <p>Useful species for wet sites and streamsides.<br/>Fast growing useful for conservation and amenity<br/>but rarely for timber production. Willow can be<br/>used in a variety of ways as a shelterbelt system</p>   | <p>Minor forest species. Native tree.<br/>Attractive tree when grown as a<br/>standard tree.</p>                   |
| <p><b>Hazel</b><br/>(<i>Corylus</i><br/><i>avellana</i>)</p>   | <p>Hazel can grow as a small tree with a single stem<br/>but is more frequently found as a multi-stemmed<br/>shrub. It has high amenity and wildlife value:</p>   | <p>Hazel is very suitable to coppice and<br/>lay.</p>  |
| <p><b>Scots pine</b><br/>(<i>Pinus</i><br/><i>sylvestris</i>)</p>  | <p>Scots pine is suited to light soils with fairly free<br/>drainage or milled peat cutaway bogs. It is a hardy<br/>species which is tolerant of frosts. It grows<br/>vigorously in its early years and can be used for<br/>amenity or timber production.</p> | <p>Forest species. Native tree. Grows<br/>well in a mixture with other species<br/>particularly oak and birch.</p> |

## Appendix 5: Definitive list of Native tree varieties suitable for Traditional Orchard\*

|                        |                    |                   |
|------------------------|--------------------|-------------------|
| Aherne Beauty          | Eight Square       | Martin's Seedling |
| Appletown Wonder       | Farrell            | Mrs Perry         |
| April Queen            | Finola Lee         | Munster Tulip     |
| Ard Cairn Russet       | Frank's Seedling   | Pêche Melba       |
| Ballinora Pippin       | Gibbon's Russet    | Rawley's Seedling |
| Ballyfatten            | Gibby's Apple      | Red Brandy        |
| Ballyvaughan Seedling  | Glenstal Cooker    | Reid's Seedling   |
| Barnhill Pippin        | Golden Royal       | Richardson        |
| Beauty of Ballintaylor | Greasy Pippin      | Ross Nonpareil    |
| Bloody Butcher         | Green Chisel       | Sam Young         |
| Brown Crofton          | Honeyball          | Scarlet Crofton   |
| Buttermilk Russet      | Irish Molly        | Sheep's Snout     |
| Cabbage Stalk          | Irish Peach        | Sovereign         |
| Cavan Rose             | Irish Pitcher      | Strippy           |
| Cavan Strawberry       | Keegan's Crab      | Thompson's Apple  |
| Cavan Sugarcane        | Kemp               | Turkey Willouby   |
| Cavan wine             | Kerry Pippin       | Valentine         |
| Clearheart             | Kilkenny Pearmain  | White Crofton     |
| Councillor             | Kiltoghert Blossom | White Moss        |
| Davy Apple             | Lady's Finger      | White Russet      |
| Dick Davies            | Leitrim Red        | Widow's Friend    |
| Dockney                | Leixlip            | Yellow Clare      |
| Ecklinville Seedling   | Lough Tree         | Yellow Pitcher    |

\* Additional species may also be considered eligible provided the objectives of the measure are met – email [glas@agriculture.gov.ie](mailto:glas@agriculture.gov.ie)

## Appendix 6: Example Provenance Declaration Form for Planting of a Grove of Native Trees

### **PROVENANCE DECLARATION FORM (For use with Forest Service Grant Schemes)**

#### **PART A Supplier's Document (To be completed by the Nursery/Supplier -Issued in accordance with Council Directive 1999/105/EC)**

Supplier's Official Registration Number:  Supplier's Document Number:

Species: Common Name: \_\_\_\_\_ Botanical Name: \_\_\_\_\_

Master Certificate of Provenance Number: \_\_\_\_\_ Country of Issue: \_\_\_\_\_

**Note: The Master Certificate of Provenance Number refers to the number of the original seed Certificate of Provenance issued by a designated National Regulatory Authority.**

Provenance Details: Country: \_\_\_\_\_ Provenance: \_\_\_\_\_

Origin: Indigenous  Unknown  If Non-Indigenous: Country: \_\_\_\_\_ Region: \_\_\_\_\_

Category: Source Identified  Selected  Qualified/ Untested Seed Orchard  Tested  Less stringent requirements/Derogation

Type of Basic Material: Seed source  Stand  Seed Orchard  Parents of families  Clone  Clonal mixture

National Register Reference or identity code for region of provenance: \_\_\_\_\_

Purpose: Multifunctional forestry  Other specific purposes (please indicate)  \_\_\_\_\_

Length of time in nursery and production type: \_\_\_\_\_

Unique identity/batch no. assigned by the Supplier: \_\_\_\_\_ Quantity dispatched: \_\_\_\_\_ Date of Dispatch: \_\_\_\_\_

Name and Address of Purchaser: \_\_\_\_\_

Delivery Address (if different): \_\_\_\_\_

Plant Passport Details (where applicable): EU Plant Passport IRL/DAF /Registration Number: \_\_\_\_\_ PZ Code: \_\_\_\_\_

Replacement Passport Details: Country: \_\_\_\_\_ Reg. No: \_\_\_\_\_ Batch No: \_\_\_\_\_

**It is hereby declared that all of the above details are correct, that the origin/provenance complies with the accepted origin/provenance list in the Forest Service *Forestry Schemes Manual*  and/or the *Native Woodland Scheme Manual*  and that where applicable the original Supplier's document is available for inspection.**

Name and address of Nursery/Supplier: \_\_\_\_\_

Authorised Person: \_\_\_\_\_

Authorised Person's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Nursery/Supplier Stamp

#### **PART B to be completed by the Contractor/Applicant**

Contract No:  Applicant's Name: \_\_\_\_\_

PART A is an Original:  PART A is a Photocopy:

**This Provenance Declaration Form accounts for:**

**All** of the trees planted of the above species on this contract:  **Part** of the quantity planted of the above species on this contract:

If **Part** indicates the numbers planted and complete a separate Provenance Declaration Form for the remainder:

If **Part** state the Plot Number(s) applicable to this Provenance Declaration Form:

**It is hereby declared that all of the above provenance details for the above contract are correct and that where the Nursery/Supplier Declaration (Part A) is a copy the original is available for inspection.**

Applicant's signature: \_\_\_\_\_

**OR** Name of Contractor: \_\_\_\_\_

Contractor's Authorised Person: \_\_\_\_\_

Authorised Person's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Contractor Stamp (where applicable)

Version: 21/2/03

## **Appendix 7: Campaign for Responsible Rodenticide Use Code (CRRU)**

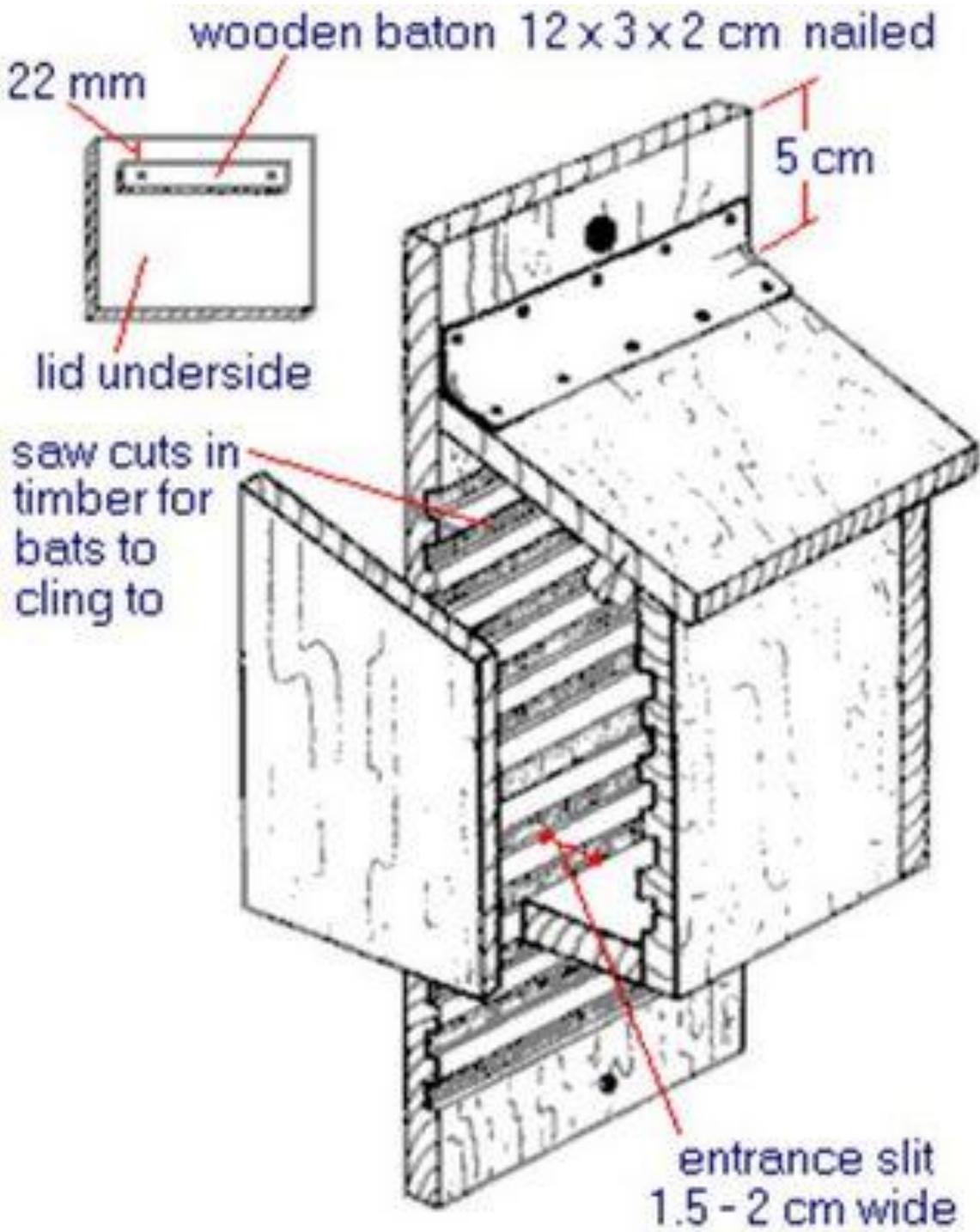
### **CRRU Code requirements:**

1. Always have a planned approach.
2. Always record quantity of bait used & where it is placed.
3. Always use enough baiting points.
4. Always collect and dispose of rodent bodies.
5. Never leave bait exposed to non-target animals and birds.
6. Never fail to inspect bait regularly.
7. Never leave bait down at the end of the treatment.

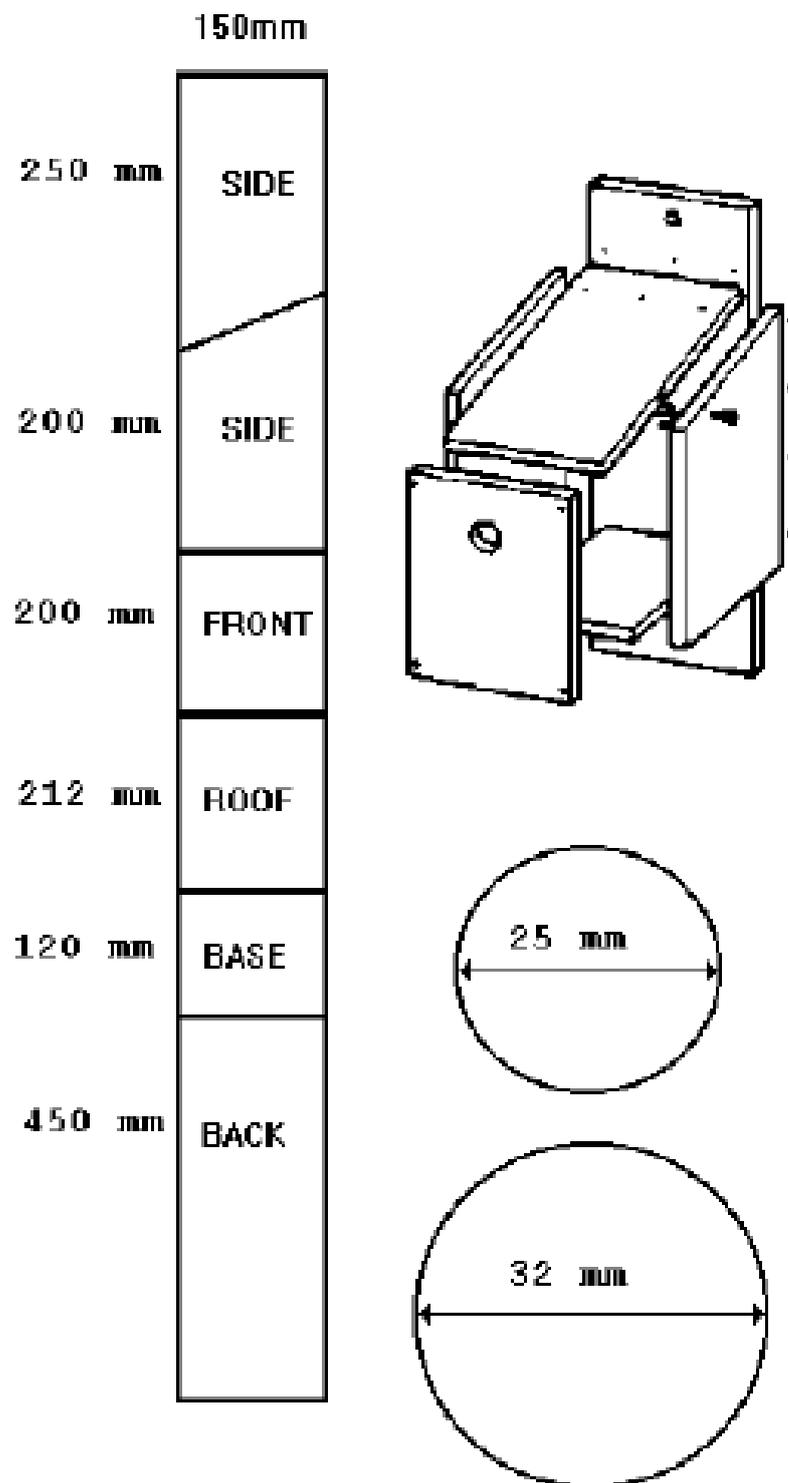
### **For further information:**

(<http://www.thinkwildlife.org/crru-code/>)

Appendix 8: Example of Bat box dimensions



Appendix 9: Example of Bird box dimensions



Small bird nest box

## Appendix 10: Example of Bee box dimensions

**Dimensions:** Holes in the wood should be between  $\frac{3}{8}$  of an inch to  $\frac{1}{4}$  of an inch. The overall box size should be no less than 30 cm high, 30 cm wide and 20 cm deep with an overhang at the front to keep rain out.



## **Appendix 11: Example method of laying a hedgerow**

### **Laying of Hedgerows**

Hedgerow laying involves the part cutting through of selected stems, bending them over at an angle of 70 - 80 degrees and securing the branches and stems to stakes driven into the hedgerow bank. There are many variations of hedgerow laying.

1. A downward angled cut is made (with a billhook, axe or chainsaw) approx  $\frac{3}{4}$  through the stem (experience will tell you how far to go). The stem is then laid over.
2. The heel or stub is cut off at a sloping angle near the ground to encourage regrowth from the ground but also to prevent injury to livestock and allow water run-off.
3. A long, thin tongue or hinge allows the laid stem to be twisted and positioned to best advantage.
4. Laid stems are secured to prevent them being damaged by livestock rubbing or pushing against the hedge and to prevent damage from strong winds. Cut stems are secured to posts driven into the hedge bank interwoven with suitable rods (hazel/willow) to give stability.

## Appendix 12: Rare Breed Societies

### Kerry Cattle Society Ltd

G.R. Hilliard (Secretary)

Cahernane,

Killarney,

Co. Kerry.

Tel: 064 6631840

email: [secretary@kerrycattle.ie](mailto:secretary@kerrycattle.ie)

web: [www.kerrycattle.ie](http://www.kerrycattle.ie)

### \* UK Dexter Cattle Society

Mrs. Sue Archer (Secretary)

Dexter Cattle Society,

Charolais Pavilion,

Avenue M,

Stoneleigh Park,

Warwickshire.

Tel: 02476 692300

email: [secretary@dextercattle.co.uk](mailto:secretary@dextercattle.co.uk)

web: [www.dextercattle.co.uk](http://www.dextercattle.co.uk)

### \* Irish Moiled Cattle Society

Ms. Gillian Steele (Secretary)

Irish Moiled Cattle Society,

'Shamrock Vale'

42 Belfast Road

Glenavy

Crumlin

Co. Antrim.

Tel: 07842 185008

Email: [secretary@irishmoiledcattlesociety.com](mailto:secretary@irishmoiledcattlesociety.com)

web: [www.irishmoiledcattlesociety.com](http://www.irishmoiledcattlesociety.com)

### Galway Sheep Breeders

Mr. Tom Murphy (Secretary)

Shrlea,

Creagh,

Ballinasloe

Co. Galway.

Tel: 09096 44233

email: [info@galwaysheep.ie](mailto:info@galwaysheep.ie)

web: [www.galwaysheep.ie](http://www.galwaysheep.ie)

Connemara Pony Breeders Society

Secretary,  
CPBS Offices,  
The Showgrounds,  
Clifden,  
Co. Galway  
Tel: 095-21863  
email: [enquiries@cpbs.ie](mailto:enquiries@cpbs.ie)  
web: [www.cpbs.ie](http://www.cpbs.ie)

The Irish Horse Board

(Irish Draught Horse Breed only)  
Beech House  
Millennium Park  
Osberstown  
Naas  
Co. Kildare  
email: [ihb@ihb.ie](mailto:ihb@ihb.ie)  
web: [www.irishhorseboard.com](http://www.irishhorseboard.com)

The Kerry Bog Pony Co-Operative Society

Mary McGrath (Secretary)  
The Kerry Bog Pony Co-Operative Society  
Barrabehy  
Mooncoin  
Co. Kilkenny  
email: [info@kerrybogpony.ie](mailto:info@kerrybogpony.ie)  
web: [www.kerrybogpony.ie](http://www.kerrybogpony.ie)

**\* Note:**

**The continued eligibility of the UK Dexter Cattle Society and the Irish Moiled Cattle Society for the extension period is subject to the outcome of Brexit negotiations and further consideration. Clarification will be provided in due course.**

### Appendix 13: Activities Requiring Consent (ARC) List

| Code   | Activity description  |
|--------|---|
| ARC-01 | Reclamation, including infilling.   |
| ARC-02 | Use of excavators, rock breakers, bulldozers, back hoes or use of any other hydraulically-powered excavation equipment.   |
| ARC-03 | Blasting, drilling, dredging or otherwise removing or disturbing rock, minerals, mud, sand, gravel or other sediment.   |
| ARC-04 | All activities relating to turf cutting and/or peat extraction.   |
| ARC-05 | Cutting, uprooting or otherwise removing plants. [Consent is not required for harvesting of cultivated crops, or for grazing or mowing.]  |
| ARC-06 | Introduction, or re-introduction, of plants or animals not found in the area. [Consent is not required for the planting of crops on established reseeded grassland or cultivated land.]   |
| ARC-07 | Removal of geological specimens including rock samples, minerals or fossils.  |
| ARC-08 | Undertaking scientific research involving the collection and removal of biological material.  |
| ARC-09 | Construction or alteration of tracks, paths, roads, bridges, culverts or access routes.   |
| ARC-10 | Construction, removal or alteration of fences, stone walls, hedgerows, banks or any field boundary other than temporary electric fencing. [Consent is not required for normal maintenance.]   |
| ARC-11 | Digging, ploughing, harrowing or otherwise disturbing soil or substrate. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 50m from a river, stream, floodplain, wetland, lake, turlough or pond.]                                     |
| ARC-12 | Applying inorganic or organic fertiliser, including slurry and farmyard manure. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.] |
| ARC-13 | Applying lime. [Consent is not required for this activity on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]   |
| ARC-14 | Storage, burial, disposal or recovery of any materials. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]                         |
| ARC-15 | Burning, topping, clearing scrub or rough vegetation or reseeded. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]               |
| ARC-16 | Modification of caves and/or their entrances.   |
| ARC-17 | Agricultural improvement of heath or bog.   |

|        |   |
|--------|---|
| ARC-18 | Application of pesticides, including herbicides. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain or greater than 50m from a wetland, lake, turlough or pond.]   |
| ARC-19 | Supplementary feeding of livestock. [Consent is not required for this activity on established reseeded grassland or cultivated land provided it is greater than 20m from a river or stream; or greater than 50m from a wetland, lake, turlough or pond.]  |
| ARC-20 | Significant changes in livestock density (including introduction of grazing), changes in livestock type or grazing season, other than on established reseeded grassland. [Consent is not required for changes of less than 20% in livestock density unless notice has been given that a lower percentage is applicable to a particular site.] |
| ARC-21 | Grazing of livestock between 1st April and 31st October on traditional winterages.  |
| ARC-22 | Changing of agricultural use from hay meadow to any other use.  |
| ARC-23 | Mowing of grass crops. [Consent is not required unless notice has been given that mowing on specified lands is likely to interfere with the breeding and reproduction of corncrakes during the period specified in the said notice.]  |
| ARC-24 | Works on, or alterations to, the banks, bed or flow of a drain, watercourse or waterbody.   |
| ARC-25 | Drainage works including digging, deepening, widening or blocking a drain, watercourse or waterbody.  |
| ARC-26 | Entry of livestock or machinery into stretches of river containing, or upstream from, freshwater pearl mussel.  |
| ARC-27 | Water abstraction, sinking of boreholes and wells.  |
| ARC-28 | Felling of trees or removing timber, including dead wood.   |
| ARC-29 | Planting of trees or multi-annual bioenergy crops.  |
| ARC-30 | Any activity intended to disturb birds, including by mechanical, air, gas, wind powered or audible means.   |
| ARC-31 | Developing or consenting to the development or operation of commercial recreational/visitor facilities or activities.   |
| ARC-32 | Off-road recreational use of mechanically propelled vehicles.   |
| ARC-33 | Using or permitting the use of land for car parking.  |
| ARC-34 | Alteration, renovation or removal of buildings, ruins or other structures.  |
| ARC-35 | Alterations or repair of sea defences or coast protection works, including cliff or landslip drainage or stabilisation measures.  |
| ARC-36 | Harvesting marine invertebrate species in intertidal areas.   |
| ARC-37 | Driving mechanically propelled vehicles in intertidal areas, except over prescribed access routes.  |
| ARC-38 | Undertaking active acoustic surveys in the marine environment.  |
| other  | Predatory control   |

#### Appendix 14: Full list of appropriate plants species for Twite B

|                       |                                |
|-----------------------|--------------------------------|
| Birdsfoot Trefoil,    | <i>Lotus corniculatus</i>      |
| Cat's Ear,            | <i>Hypochaeris radicata</i>    |
| Dandelion             | <i>Taraxacum</i>               |
| Devil's Bit Scabious, | <i>Succisa pratensis</i>       |
| Forget-me-not,        | <i>Myosotis arvensis</i>       |
| Kidney Vetch,         | <i>Anthyllis vulneraria</i>    |
| Lady's Bedstraw,      | <i>Galium verum</i>            |
| Lady's Smock,         | <i>Cardamine pratensis</i>     |
| Lesser Knapweed,      | <i>Centaurea nigra</i>         |
| Marsh Ragwort         | <i>Senecio aquaticus</i>       |
| Meadow Buttercup,     | <i>Ranunculus acris</i>        |
| Meadowsweet,          | <i>Filipendula ulmaria</i>     |
| Ox-eye Daisy,         | <i>Leucanthemum vulgare</i>    |
| Purple Loosestrife,   | <i>Lythrum salicaria</i>       |
| Ragged Robin,         | <i>Lychnis flos-cuculi</i>     |
| Red Bartsia,          | <i>Odontites verum</i>         |
| Red Clover,           | <i>Trifolium pratense</i>      |
| Redshank,             | <i>Polygonum maculosa</i>      |
| Ribwort Plantain,     | <i>Plantago lanceolata</i>     |
| Scented Mayweed,      | <i>Matricaria recutita</i>     |
| Selfheal,             | <i>Prunella vulgaris</i>       |
| Sheep's Sorrell,      | <i>Rumex acetosa</i>           |
| Shepherds Purse,      | <i>Capsella bursa-pastoris</i> |
| Smooth Hawksbit,      | <i>Leontodon autumnalis</i>    |
| Sorrel,               | <i>Rumex acetosa</i>           |
| St. Johnswort,        | <i>Hypericum perforatum</i>    |
| White Clover          | <i>Trifolium repens</i>        |
| Wild Angelica,        | <i>Angelica sylvestris</i>     |
| Wild Valerian,        | <i>Valerian officinalis</i>    |
| Woundwort,            | <i>Stachys palustris</i>       |
| Yellow Rattle,        | <i>Rhinanthus minor</i>        |

## **Appendix 15: Conditions for Certain Natura Sites**

### **Conditions for the Blanket Bogs, Heaths and Upland Grasslands**

#### ***General Provisions***

The primary recommendation is to avoid farming practices that cause environmental damage and all the following recommendations are designed to meet that objective. If a practice is environmentally damaging it must be stopped or modified, but the following are general guidelines and may be superseded by specific recommendations for individual farms.

#### ***Detailed Conditions***

##### **Stocking Density**

In all cases an environmentally sustainable plan must be prepared and adhered to for the total area of the farm. Sustainable optimum stocking rates must be set down by the planner following careful assessment of the environmental conservation needs of the lands.

Where the stocking levels set down by the planner require a reduction in stock this must be achieved within one year of the commencement of the plan. There can be no increase in stocking levels, no introduction of stock to new areas and no changes in stock type during the period of the plan without the prior approval of NPWS. The maximum number of sheep that may be kept on the farm as a whole must be set down in the plan. The following parameters apply:

- Where there is no damage the current stocking levels are acceptable.
- If the level of damage is moderate a stocking reduction must be prescribed by the planner at a level related to the damage and sufficient for the vegetation to recover.
- If the level of damage is severe, a stocking reduction of between 70% and 100% of ewe numbers on the damaged area must be prescribed for a specified period.

At the review of the plan, the conservation status of the areas will be reviewed. A change in the stocking levels (increase or decrease) may be appropriate depending on progress.

Stocking levels apply to Scottish Blackface sheep or similar medium sized sheep breeds. Stocking levels for cattle or other stock should be at livestock unit applicable rates taking account of the conversion rates for the various stock types. The stocking levels recommended in this document are maximum sustainable rates for year round grazing. If shorter periods of grazing are used the number of animals may be increased, though not necessarily pro rata.

### **Supplementary Feeding**

Supplementary feeding is permitted only on areas where it is currently practised. Locations of feeding points must be specified. To reduce heavy grazing, trampling, poaching and erosion problems, “feeding points” should be moved every 3 weeks and sited on ground with least habitat and wildlife value, preferably on grassland well away from stands of heather. Feeding on steep slopes and on peaty soils should be avoided where possible. The total amount of feed used must not be increased.

### **Use of Fertilisers and Herbicides**

Neither organic nor inorganic fertilisers nor lime can be applied on bogs, heaths or upland grasslands where they have not been used before. Fertilisers must not be used as a means of regenerating eroded areas. In the case of upland grasslands fertilisers can only be applied on the basis of the results of a soil test. Where fertilisers are being applied, the initial soil sampling should be relatively intensive with at least one sample per 2–4 ha. Target soil phosphate levels must not exceed the Index 2 level set out in this specification.

Spraying or broadcast application of herbicides must be avoided. Spot application and wipe-on treatments to eradicate docks, thistles, ragwort and similar noxious weeds may be used. Rhododendron may be removed by cutting and herbicide treatment. Bracken control may be by rolling, cutting and/or by controlled cattle trampling in early summer. In exceptional circumstances control of bracken by herbicides may be permitted.

### **Water Pollution**

The greatest care should be taken to observe the statutory requirements on water pollution. The hydrology of bog land areas is characterised by extremely nutrient poor surface waters, which contain flora and fauna adapted to these conditions. These species would be adversely affected by nutrient enrichment. New sheep dip sites must be listed and located away from streams and

flushes to reduce the possibility of water pollution and damage to flora and fauna.

### **Restricted and Prohibited Practices**

The following practices must not be carried out on Blanket Bogs, Heaths or Upland Grasslands:

- The areas must not be drained, ploughed, cultivated or reseeded.
- There must be no infilling or rock removal.
- Turf cutting on unexploited bogs is not permitted. Turf cutting for domestic use is permitted on existing banks.
- Planting of trees or other crops is not permitted.
- No new tracks or paths can be created.
- Burning is only allowed as a planned management practice.
- Gorse may be controlled by cutting, spot spraying or exceptionally by burning outside of the bird nesting season (March 1st to August 31st).

### **Conditions for the Sand Dune and Machair Areas**

The primary recommendation is to avoid farming practices that cause environmental damage and all the following recommendations are designed to meet that objective. If a practice is environmentally damaging it must be stopped or modified, but the following are general guidelines and may be superseded by specific recommendations for individual farms.

### **Detailed Conditions for Sand Dunes and Machairs**

#### ***Description***

Sand Dunes and Machairs are coastal habitats consisting of hills and hollows in which unique communities of plants and animals are found in response to the very demanding nature of the dry, windy and salty environment.

Machairs are flat, level plains over lime-rich sands which have evolved in response to a unique interruption between wind, high rainfall and historical land use. They are found only in western Ireland and Scotland.

### ***Grazing Regime***

It should be noted that on sand dunes and machairs, the objective is to maintain extensive agricultural practices, and to prevent a further increase in stock numbers. Cattle stock must be kept at the level the land can support - see also the section on Supplementary Feeding.

Cattle grazing should continue in line with traditional practices. The land should normally be grazed only in winter. However, in areas where Summer grazing has traditionally (i.e. over the previous 10 years) been practised, this can continue, provided, of course, that stock levels at all times do not exceed what the land can bear on a sustainable basis. Grazing on young and fore-dune areas should be avoided. Where conditions warrant, grazing levels must not exceed

1 Livestock Unit (LU) per hectare on a year round average and must never exceed 2 LU at any one time. This change would enable 2 LUs to be overwintered on the sand dune/machair provided it is deemed to be sustainable by the planner.

The introduction of sheep into areas where they have not been traditionally grazed should be avoided, but areas which have kept sheep traditionally can retain them, though perhaps at a lower level.

### **Sustainable stocking levels**

The planner should set stocking levels for each farm in the farm plan. The levels should be set below the level which causes eutrophication, overgrazing, or erosion, but still high enough to control the encroachment of coarse vegetation and scrub. Where the stock level set by the planner requires a reduction, this must be achieved within 12 months of the start of the plan. Where the stock level is to increase, this can be spread over the period of the plan, as specified by the planner. Where a conservation plan has been prepared for the SAC in question, this should be used to assist in determining where damage has occurred or is occurring, where damage is moderate, and where damage has not occurred.

Official conservation plans, when available, can be obtained from the local office of the NPWS.

### **Supplementary feeding**

The introduction of supplementary feeding can bring additional nutrients into sand dune and machair areas, and thus bring about a very fundamental change in the vegetation of these areas. The use of silage and other feed can facilitate excessive stocking levels and may lead to pollution of

groundwater. Consequently, the use of any supplementary feeds in areas where it has not been customary over the last ten years may be allowed only in consultation with NPWS.

Round-baled silage can be stored in these areas. Loose silage can only be stored where an approved effluent collection system is in place and the effluent is removed from the machair/sand dune.

No supplementary feeding can take place on young and fore-dune areas.

In machair and grey dune areas where supplementary feed has been used over the last 10 years it may be continued, provided that

- The number of LUs fed does not increase
- The species of stock fed does not change
- The total amount of feed equivalent does not increase
- The amount of feed does not exceed 3.5 tonnes of silage or 0.75 tonnes of hay per LU
- No meals and concentrates are fed.

However, in exceptional circumstances, such as in unusually severe weather conditions (i.e., when there are heavy snowfalls or floods), and with the agreement of NPWS, feeding will be permitted. Weanling cattle may be fed small quantities of concentrates.

### ***Cultivation, reseeded and pesticides***

Ploughing, harrowing or any other form of cultivation must be avoided since this will destabilise the dune structure. Small traditional tillage plots on machairs may be retained. The bringing in of any seeds to these areas will disturb the vegetative balance on which the dune depends and must be avoided. The feeding of hay should only be from round feeders.

The fixed dune parts of sand dunes are essentially areas with low levels of plant nutrients in the soil and this has contributed to the development of their distinctive flora. These are also areas most used for grazing. However, the spreading of organic (slurry, FYM), or inorganic fertilisers must not take place, as the flora in these areas would be damaged.

On machairs, where fertiliser has not been applied in the past, none can be applied now. However, where low levels of phosphorus have traditionally been applied on machairs, this may continue,

provided that the soils Phosphorus levels do not increase above their present levels or in any event do not exceed Soil Index 2.

### ***Pesticides and Herbicides***

All spraying or broadcast application of herbicides must be avoided, but spot application and wipe on treatment to eradicate docks, thistles and similar noxious weeds can be used.

### ***Animal Treatments***

Worm doses may be used normally, but animals, which have been given pesticides, the residues of which persist in the dung must be kept off the dune for at least a week after treatment.

### ***Dumping and infilling***

The dumping of domestic or industrial refuse, farm wastes, rubble, rock, or any similar materials which could disturb the natural environment by bringing in unsuitable nutrients or unsuitable soils and seeds must be avoided.

## **Farming Conditions for the Conservation of River SACs**

### ***Fertiliser in River SACs***

In river SACs, no chemical fertiliser should be applied within 2 m of any watercourse.

In river SACs, the recommended buffer strip when spreading organic manures is up to 10 m from streams and drains and up to 20 m from main river channels. Where SAC boundaries have been reduced to 2.5 m, the relevant buffer is that under Cross Compliance.

### ***Notifiable Actions***

Current farming activities can continue without notification unless they involve any of the following, which, as they may impact upon habitats, are notifiable actions (that is actions which would require consultation and consent in advance):

- Reclamation, infilling or drainage (other than cleaning of drains<sup>2</sup>) within 5m of the riverbank.
- Removal of trees; reseeded of lands where this has not been practiced for 10 years or more; or afforestation.

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<sup>2</sup> Cleaning of existing drains within SACs is not a notifiable option.

- Ploughing or use of any pesticides where this has not been practiced for 10 years or more.
- Any use of pesticides (herbicide or insecticide) within 5 m of the riverbank.
- Intensification of current farming activity.
- Alteration of the banks, channel, bed or flow of the river.

### ***Ploughing***

A minimum uncultivated margin from watercourses of 3 m must be maintained. This will extend to 5 metres where the SAC boundary is greater than 2.5 metres.

## **Prescription setting out Farming Conditions applicable to Wet Grasslands, including Callows, Wet lowland Grassland, Fens and Marshes**

### ***Grazing***

Traditional<sup>3</sup> grazing practices to be maintained. The planner shall confirm what constitutes traditional practice, which shall include the numbers and type of livestock, the species use and the seasonal grazing pattern. Sheep and/or goats are not to be introduced into areas where they have not been traditionally found. The land must not be under-grazed. Between the 10th March and the end of June a 1LU/ha stocking rate limit applies.

### ***Supplementary Feeding***

No supplementary feeding is to be introduced into areas where it was not traditionally done. Some feeding of concentrates may be permitted by agreement with National Parks and Wildlife Service in individual circumstances. Any such permission shall be written into the plan at the time such plan is prepared.

### ***Mowing***

In areas where the corncrake prescription does not apply mowing shall not be commenced before 30th June unless the land has been managed in the past that there is little diversity of plants. Any exceptions to this must be explained in the farm plan.

“Mowing” includes topping, grass churning or rolling.

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<sup>3</sup> “Traditional” means practices in use over the previous ten years

### **Fertilisation**

Fertilising by chemical or organic means can take place in the same way, in accordance with “Good Farming Practices”, and with no intensification, only on callows that have been traditionally fertilised in that way.

### ***Drainage***

Maintenance of existing drains shall be permitted and no other drainage works shall be embarked upon except with the prior agreement of National Parks and Wildlife Service. Any such permission shall be written into the plan at the time such plan is prepared.

### ***Dumping, Infilling or Burning of Vegetation***

No dumping or infilling shall be allowed. Disposal of agri-waste, such as spoiled hay, is considered dumping and is prohibited. The piling and subsequent burning of waste hay is permitted on site so long as it is in accordance with normal legal provisions. The importing of materials from other sites for the purpose of burning is strictly prohibited.

### ***Reseeding, Reclamation or Tree Planting***

No reseeded, reclamation or tree planting shall be permitted except with prior agreement with National Parks and Wildlife Service and any such agreement shall be included in the plan.

### ***Road Construction***

Construction of new roads (including culverts and bridges) is permitted only with specific agreement with National Parks and Wildlife Service. Any such agreement is to be written into the plan. The maintenance of existing roadways is not restricted.

### ***Use of Persistent Animal Treatments***

Pest control chemicals, which are persistent in the animals and leave residues in animal dung for long periods shall not be applied to animals using the site. Pour-on or injectable forms are acceptable.

***Use of Herbicides***

Control of noxious weeds and docks is permitted by spot spraying only. The use of herbicides for the control of other species, or control by means other than spot spraying, shall be permitted only by specific agreement with National Parks and Wildlife Service and any such agreement shall form part of the plan.

## **Appendix 16: Details on Noxious and Invasive Species/Weeds**

### Noxious Weeds

A noxious weed is a plant species which has been designated by a statutory authority as one that is injurious to agriculture, horticulture, habitats/ ecosystems and humans or livestock. They are usually injurious to human or animal health. Noxious weeds can be native or introduced. A native species may not pose a threat when growing in a natural forest type situation, but becomes a problem with changing landscape; e.g. clearance to cultivation. They are usually plants, which multiply aggressively and without any natural control such as herbivores or soil or climatic conditions.

Ragwort (*Senecio Jacobea*) is also known as ragweed, buachalán and buachalán buidhe (in Ireland). Ragwort is highly toxic to cattle, horses, deer, goats, pigs and chickens. The poisonous substances in ragwort are toxic alkaloids (Jacobine, Jacodine and Jaconine). These cause the liver to accumulate copper, causing ill health and death. The poisonous material contained in ragwort is not destroyed by drying. Grass silage containing ragwort is also a serious source of poisoning. Seed is the principle method of spreading this weed, but root fragments are also capable of reproduction. Each plant produces 50,000-200,000 seeds over a 4-6 week period. Ragwort is a biennial plant, i.e. it grows from seed and remains in the rosette stage for the first growing season. In the following year it produces its familiar golden yellow flowers on a stem varying in height from 45 to 75 cm.

E.g. Ragwort, Thistle, Dock, Common Barberry, Male Wild Hop, Spring Wild Oat

### Invasive Species

Invasive species are species that have been introduced (deliberately or accidentally) by humans and have a negative impact on the economy, wildlife or habitats of Ireland and Northern Ireland. After habitat loss, invasive species are the second biggest threat to biodiversity worldwide, and the biggest threat on islands.

Examples include New Zealand Bur, Sycamore, Great Maple, Daisies, Montbretia, European Rabbit, Reed Grass, Common Pitcher Plant, Canada Goldenrod, Cotoneaster, Himalayan Knotweed, Evergreen Oak, Holm Oak.

Further details on invasive species can be found at [www.invasivespeciesireland.com](http://www.invasivespeciesireland.com)