Burren PROGRAMME

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

An Roinn Cultúir, Oidhreachta agus Gaeltachta
Department of Culture, Heritage and the Gaeltacht

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

## Best Practice Checklist No.1

# Optimising your (I-1) Field Score

*Note: This Best Practice Checklist is also available in hardcopy format titled 'Introductory Management Guidelines for Burren Farmers'.*

## What is the Burren Programme (BP)?

The BP is a locally-led agri-environmental scheme which works with farmers to help them to conserve the Burren's environment, namely its landscape, biodiversity, archaeology and water, whilst allowing them to continue producing quality livestock. It was developed in the Burren, for the Burren, by working with local farmers during the BurrenLIFE project and the Burren Farming for Conservation Programme. It gives you, as a local farmer, the opportunity to look after your farm for yourself, your family and your community - and to be rewarded for it.

## How do payments in the BP differ from other agri-environment schemes?

As with previous and current national agri-environment schemes such as REPS, AEOS and GLAS, the BP will include a payment for 'actions' or 'work done'. These actions will be chosen by the farmer to suit their own land and farm setup, although they must help to better manage and conserve the Burren. But in addition to this, within the BP, farmers will also receive an annual 'payment for results'.

## What does 'payment for results' mean?

The payment for results approach of the BP offers an incentive for farmers to maintain or improve the management of their land to benefit the Burren's environment. Those farmers who use their knowledge, experience and skill to do this well, will be justly rewarded - the better the result, the bigger the reward (payment).

## How will the payments for results be calculated?

The BP will use a simple scoring system to assess the 'environmental health' of each field in the Programme. The field scoring system will differ slightly depending on the overall habitat type, e.g. winterage grassland or Burren lowland grassland (see the last page for a note on 'What are Burren lowland grasslands'), but they will follow the same broad principles as outlined below.

Every field in the BP will be scored by your trained farm advisor each summer, and some will also be assessed by the local Burren Programme team. Field scores can range from between 0-10, though a field must reach a minimum score of 5 to receive any payment; after which the payment level increases with increasing score. Fields which are in very good condition (those scoring 9 or 10) will earn proportionally higher 'bonus' payments, to reflect the level of skill and work involved in achieving these high scores.

## How can I improve my field scores?

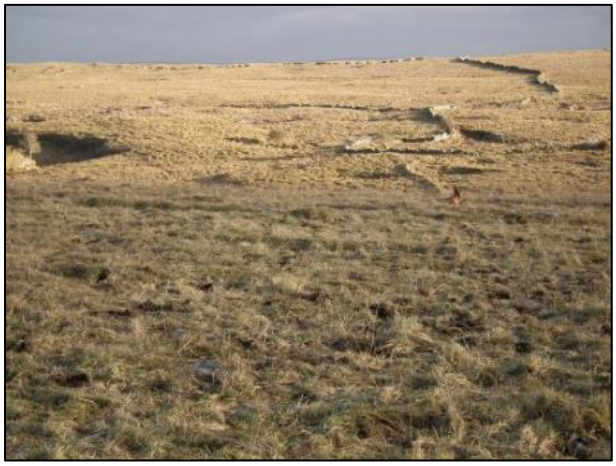
Simply put, to achieve a high score a field needs to be well grazed (as appropriate for the habitat type); while it shouldn't have any issues with damaged water sources or unsuitable feed sites, and have low levels of encroaching scrub, bracken and agricultural weeds, and show no other damaging activities. The checklist below offers some useful tips on the management needed to address any of these issues on winterages and Burren lowland grasslands; and thereby help improve their 'environmental health' and resulting field scores. This checklist is divided across 10 criteria, each of which contributes to the overall field score.

The full set of instructions used by advisors to score winterages and Burren lowland grasslands is available at www.burrenprogramme.com or from the BP office in Carron. You will also be given training that will help you to score your own fields. Most important of all is to carefully read your yearly issued I-1 Sheet, as this will give clear management recommendations for each field that can be used to improve your field scores and increase your overall Intervention 1 (I-1) payment.

## 1. Grazing *(refer to your own farm plan for field specific recommendations)*

**Winterages**

- For 'weak' and 'weak-middling' winterages, graze the field tightly over the winter grazing season (October to late April), and rest the field fully through the summer.
- For 'strong' and 'middling-strong' winterages, graze the field lightly in late summer (July/August) followed by a tight winter graze. Aim to start winter grazing by late September/ early October before the stronger grasses lodge and can no longer be grazed out properly.
- Generally, do not graze winterage fields during the main summer flowering period (May-June), unless otherwise stated in your farm plan (e.g. for one year only to restore pastures that have become very rank due to undergrazing).
- **For more details on appropriate grazing regimes on winterage grasslands, please see the *BurrenLIFE Best Practice Guide No. 3 - Sustainable Grazing of Burren Winterages.***

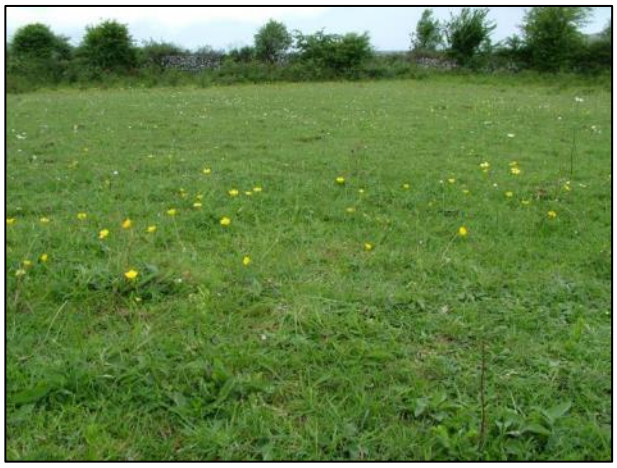


*Undergrazed winterage field, where a lot of uneaten grass forage remains after the cattle.*

*Stronger winterage field, benefiting from a light summer graze to top-off the heavier growth.*

**Burren Lowland Grasslands**

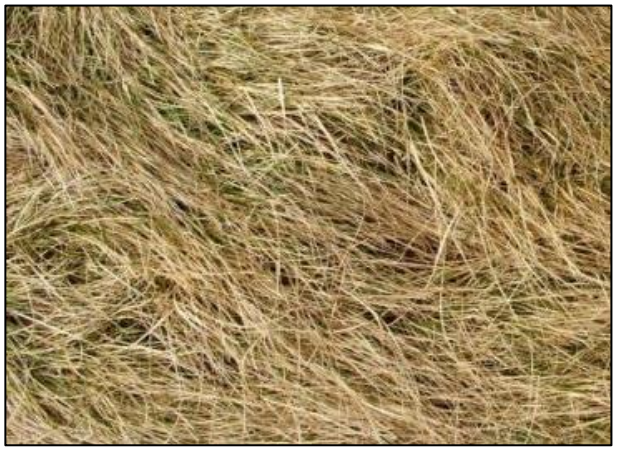
- Rest weaker '**meadow-like**' fields from May to mid-July, and then graze them so that as many plants as possible still get to flower and set seed. Stronger meadow-like fields can be lightly grazed through the spring and summer months.
- Aim for a sward of varying heights throughout the year, i.e. some short, some middling and some long. The sward should be about 5-15cm high across ¾ of the field all year round.
- If mowing, delay cutting until mid-July if possible, and then graze the after grass.

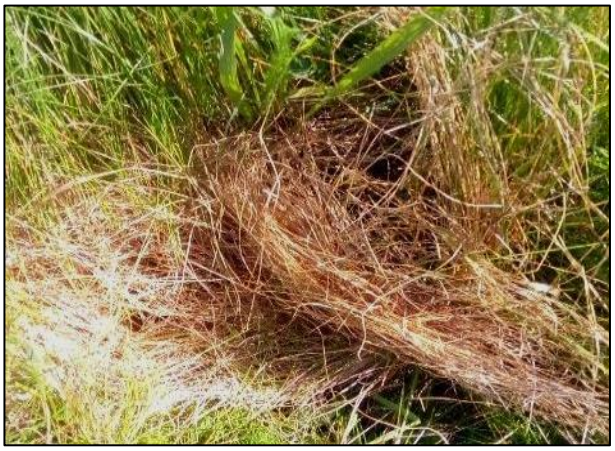


*An overgrazed Burren lowland grassland meadow in late June. The sward has already been grazed down too short overall, with very few plants remaining to flower and set seed.*

## 2. Plant litter (dead and rank vegetation)

- Graze winterages with 'stronger' areas of vegetation lightly in late summer (July/August) to top-off the heavier growth, and start winter grazing earlier (by late September/early October), or grasses and herbs in these areas will lodge, become rank and form excessive plant litter.
- Grazing with horses or donkeys can be effective in reducing levels of built-up plant litter in cases where fields have been undergrazed for a number of years.
- Feeding livestock a supplementary concentrate can help improve their foraging and intake of coarse vegetation, and may help in reducing plant litter levels.
- Plant litter or rank vegetation should not be burnt at any time.

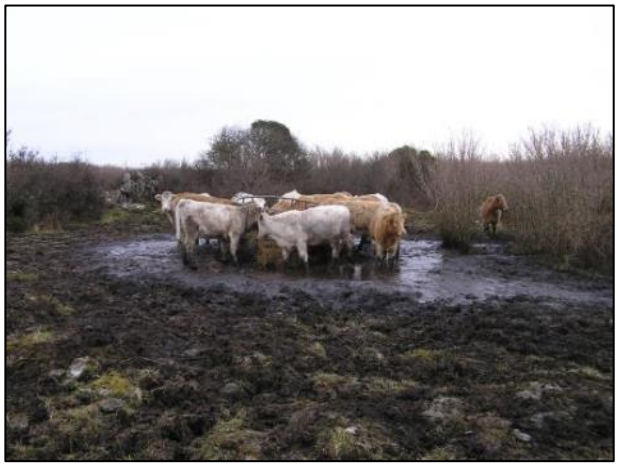




*Excessive dead vegetation (plant litter) builds up in undergrazed areas, which will reduce the quality of the following year's grazing, and also smother out the wild flowers and herbs.*

## 3. Supplementary feeding

- Do not feed large bales of hay or silage, or use feed trailers, on winterages. Only use loose hay/silage in emergency situations. Feeding large bales of hay or silage will result in no payment for that field that year, plus any adjacent winterage fields to which livestock have open access, unless there are valid mitigating circumstances.
- Position any concentrate feed troughs where they will have the minimum impact:
  - At existing or old feed sites (unless these are vulnerable to damage), and minimise the unnecessary moving of troughs as this will disturb a larger area.
  - Do not place them on wet or peaty soils as this will result in rapid poaching and damage.
  - Do not feed close to or on any archaeological features, including old mound walls.
- Ideally, consider feeding concentrates directly on the ground at clean grassy spots, ensuring to use different locations daily. If done well there should be little to no bare soil created, while also reducing anticipatory livestock congregation when feeding this way.
- Remove all used feed bags and tidy up any equipment from the field after use.
- **For more details on the suitable supplementary feeding of livestock, please see the *BurrenLIFE Best Practice Guide No. 4 – A Guide to Feeding Cattle on Burren Winterages.***

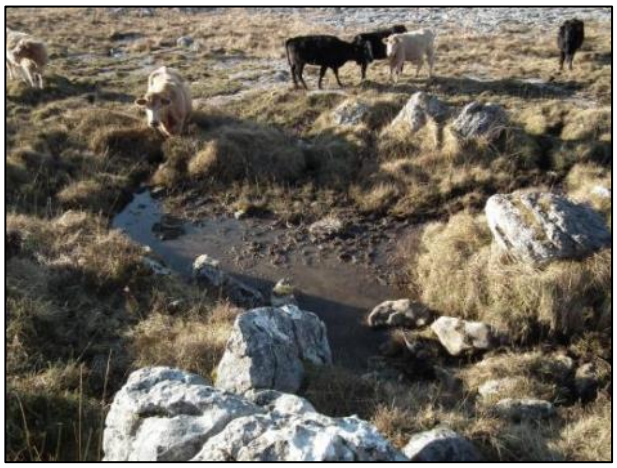


*Silage feeding can cause damage to habitats, reduce grazing levels, pollute the ground water and look very unsightly.*

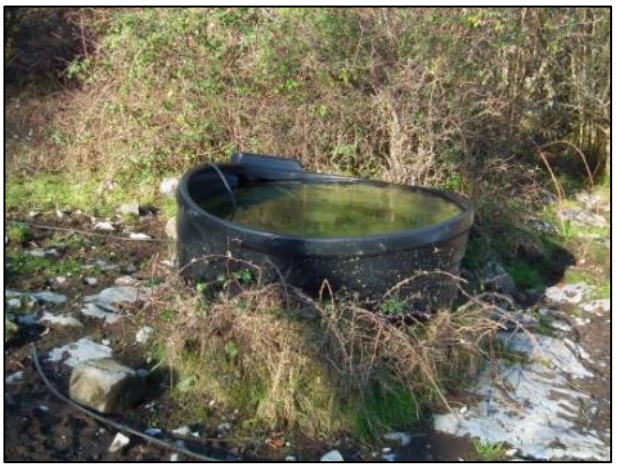
*Feeding supplementary concentrates can help to improve grazing levels, but if you use troughs, place them in suitable locations.*

## 4. Natural and alternative water sources

- Protect all vulnerable natural water sources (springs, streams, ponds, turloughs) by piping water to an alternative drinking trough, installing a nose pump or, where suitable and practical, by fencing or walling them off to prevent livestock access**.**
- When providing livestock with alternative water supplies such as water troughs, place them in accessible locations on suitable ground, and away from any archaeological features.
- Overflow/leakage from watering points will lead to increased poaching in the vicinity, so make sure that troughs sit firmly on a solid, level base and that any overflow (if present) is piped away from the immediate area unless it is feeding into an existing swallow hole.
- **For more details on Water Management, please see the *BP Best Practice Checklist No. 4.***



*Damaged water sources contaminated with dung are bad for animal and habitat health.*

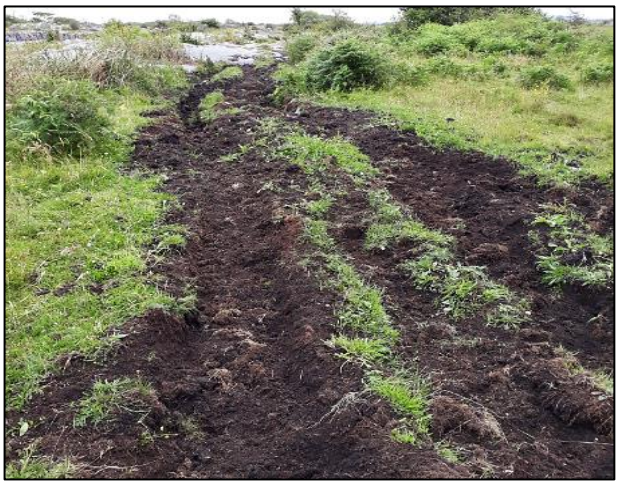


*Water troughs should be installed properly, sitting firm on a level base to prevent overflow.*

## 5. Bare soil and erosion

- Remove livestock from a field or temporally fence off a section when they are congregating in one area and bare soil and poaching is starting to become a problem.
- Try to avoid large herd sizes in small winterage fields as this is likely to increase the trampling of grass and also risk poaching damage.
- Avoid the use of heavy machinery on winterages, especially in wet conditions as this will cause rutting damage and soil compaction.
- Ensure that excessive bare soil isn't building up around or leading up to feed or water troughs; alternative, more suitable locations will be necessary if this is the case.

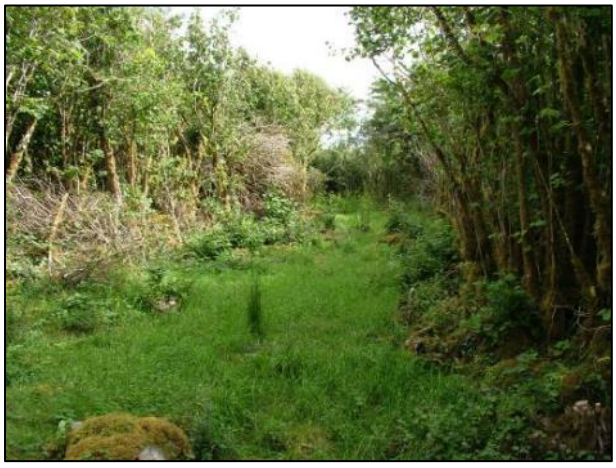
*A poorly placed feed trough can lead to soil erosion, especially if the field is heavily stocked.*



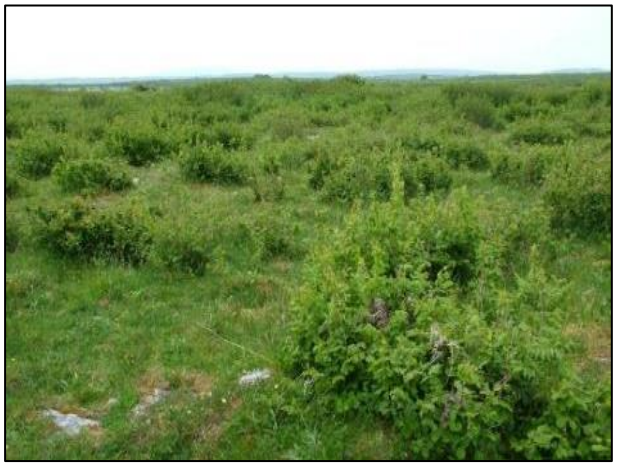
*Heavy tractor tracking causing deep ruts and soil disturbance. Avoid any unnecessary trips.*

## 6. Encroaching scrub

- Prioritise the targeted removal of scattered, immature scrub (mostly hazel and blackthorn) where it is actively encroaching onto grazeable species-rich areas; as it may affect your scores.
- **Mature hazel scrub (with woodland flora) and scattered trees, such as whitethorn, ash, spindle and holly must not be removed; these do not affect or reduce your field scores, but their unauthorised removal will.**
- Also focus on opening up paths through scrub to improve access and connectivity between grazeable areas - identify paths which are still used by livestock and open to about 3m wide.
- Scrub control needs to be both properly planned and carried out if there is to be a lasting benefit. Make a multi-annual scrub plan that includes enough time to address regrowth.
- Consideration should be given for the potential use of a track machine to cut or pull scrub, as this can be much more efficient. However, the use of a track machine for scrub removal is only possible based on terrain suitability and safe access. All potential machine scrub work will require additional planning and consultation with the NPWS, and possibly also the National Monuments Service; and will only be permitted and funded if carried out in accordance with all listed guidelines.
- Heather is generally not considered a problem when present; unless there are extensive stands of tall (knee height), dense and over-mature heather that dominate the grassland and hinder grazing. If you have such areas, you could consider targeted strimming.
- **For more details on suitable Scrub Removal, please see the *BP Best Practice Checklist No. 2.***



*Opening paths through scrub can improve grazing and make herding easier.*

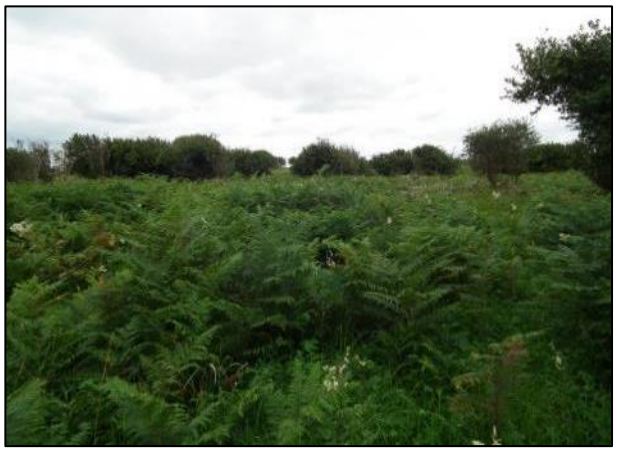


*To improve the habitat, remove scrub from areas where there are still grassland flowers.*

## 7. Bracken

- Bracken, often called 'ferns' locally, is mostly only a problem on stronger winterages and in pockets of deep soil, where it grows tall (above knee height) and forms dense, closed-canopy stands that shade out the flora beneath. It can also be more of a problem on Burren lowland grasslands where there is little or no summer grazing.
    - If present as scattered individuals or small clusters, or when growing along soil filled grikes, walls or field margins, bracken is not considered nor scored as a problem.

- Trampling by livestock through targeted light grazing in late May/early June can be beneficial as it can weaken bracken but should only be used when recommended in your farm plan. Repeated heavier grazing at this time can have a negative impact on the flora.
- For effective control of bracken, it is recommended to cut or (ideally) bruise it twice in summer: first in June just as the fronds finish unfurling, and then again 6-8 weeks later to drain the perennial rootstock. Cutting only once a year, after June is generally ineffective.

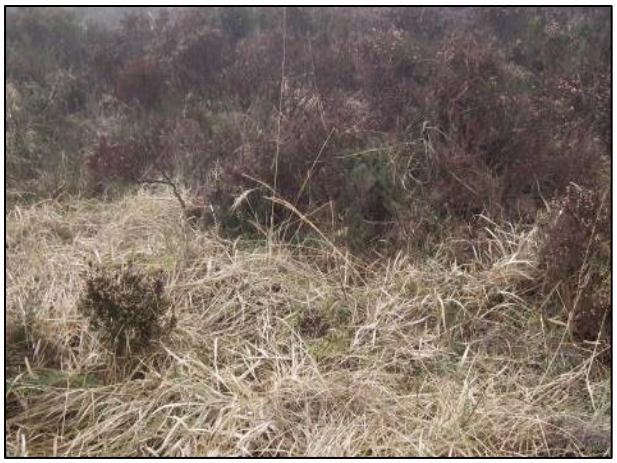


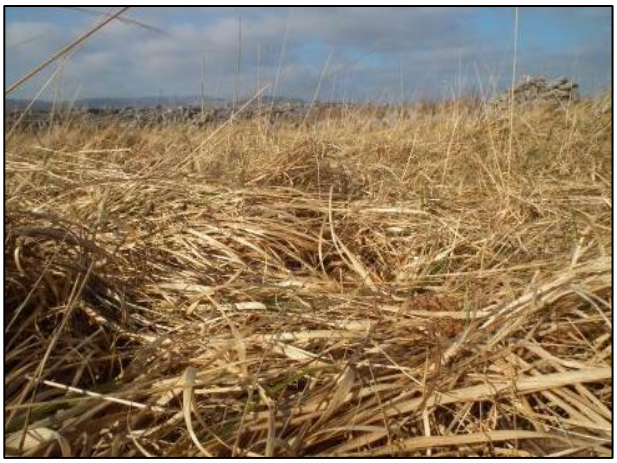
*Consider bracken control in areas where it is forming tall dense stands or is increasing.*

*Bracken is a perennial type of fern, and will require repeated control to reduce its cover.*

## 8. Purple moor-grass

- Purple moor-grass grows naturally, and often very abundantly, on damper soils in the Burren. Cattle will eat it in summer when it's fresh, but will no longer eat the coarse dry leaves in winter when it becomes very unpalatable, unless there is nothing else. If left uneaten it forms a thick layer of white grass litter that smothers out other grasses and flowers over time.
- Fields where it occurs should be grazed lightly sometime between mid-June and mid-August. The cattle mostly top-off the purple moor-grass before eating other grasses during such a targeted summer grazing, so correct timing will not reduce the grass availability in winter.
    - Please refer to your farm plan for field specific grazing recommendations.

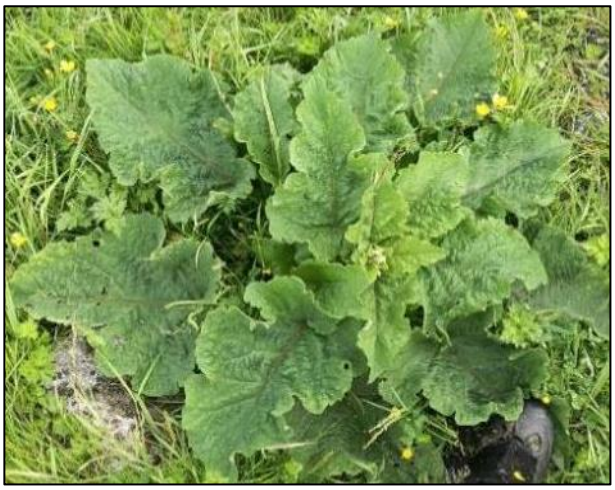




*If not grazed in summer when palatable, the leaves of purple moor-grass can build up a thick layer of litter; suppressing other grasses and flowers, making the field less biodiverse and less productive.*

## 9. Weeds and agriculturally-favoured species

- Weeds and agriculturally-favoured species are plants that do not typically occur on winterages, other than maybe along regularly used shelter walls or at gates. Their presence usually indicates past silage feeding, incorrect grazing regimes or historic disturbance/reclamation.
    - *Note: Weeds associated with actively used feed sites are assessed and scored under the previous section 'Supplementary feeding' impact.*
- Where needed, control problem weeds (e.g. creeping and spear thistles, docks, ragwort, nettles, hogweed, burdock) by cutting or pulling them before they come into full flower.
- Targeted summer grazing (i.e. confined to enriched past feeding areas) may also help to reduce the cover of unwanted species such as chickweed, redshank, timothy and ryegrass.



*Weeds such as burdock (left) and thistles (right) are often found at feed sites and other areas where nutrient and disturbance levels remain high; and may need targeted control to reduce their occurrence.*

## 10. Ecological Integrity (Winterages) & Conservation Value (Burren lowland grasslands)

**Winterages**

- Identify reasons why the field doesn't look like it should, e.g. has it been altered through past practices including regular summer grazing, fertilisation, reseeding, reclamation or dumping?
- Stop any damaging practices and discuss with your advisor and Burren Team what, if anything, can be done to restore the integrity of the field.
- Ensure all work is carried out to a high standard and in full accordance with the listed guidelines so not to cause any damage - failure to do so may lead to a reduction in the integrity score, e.g. non-targeted herbicide use when treating regrowth; the cutting of mature scrub or trees.

**Burren lowland grasslands**

- Identify, with your advisor, any fields you think may qualify for payment as Burren lowland grasslands (see below). As the quality of these fields varies, a botanical survey will need to be done by a suitably qualified person to determine the field's 'conservation value'. The aim is then to maintain or improve the conservation value through continuous good management.
- Do not any apply fertiliser or slurry, do not reseed, and do not use herbicides (other than if spot-treating noxious weeds or encroaching scrub), as these activities will negatively affect a field's floral diversity and thereby the conservation value - and field score.

## What work should I carry out to help improve my field scores?

Look over these 10 sections (scoring criteria) listed above and see which, if any, may be affecting your field scores – refer to your BP farm plan as it will aid you in this. Then see what actions and management changes are needed to address the issues present; so as to help increase your field scores and maximise your annual result-based payment.

***Remember:***

- ***ensure your winterage fields are being grazed out well, and at the right time of year; getting the grazing right is the main driver of your field score.***

Then together with your farm advisor, decide on a work plan to include for BP funding; aimed at helping you to improve the grazing management and condition of your fields.

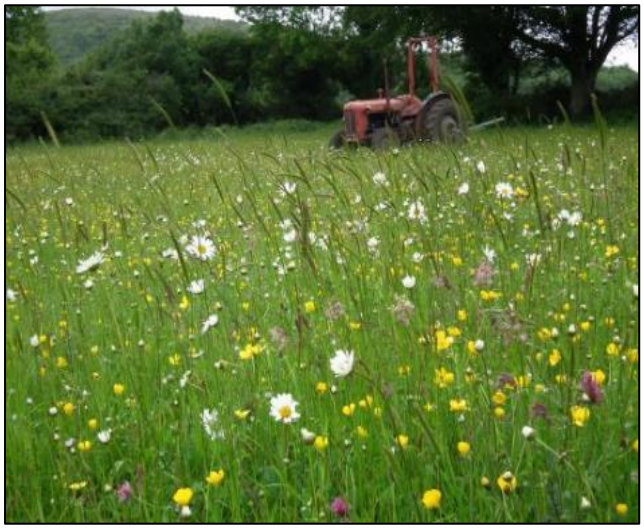
See some example of work options below:

- Would **repairing internal walls** and **installing gates** help to better target the grazing?
- Would **providing or improving the water supply** in certain fields facilitate increased grazing?
- Would **opening paths through scrub** make it easier for livestock to move between grazeable areas and for you when herding?
- Would **investing in supplementary feed equipment** such as meal bins or feed troughs help you move away from silage feeding and encourage improved winter grazing?
- Would **improving vehicle access** to certain fields help with livestock and grazing management?
- Are there **natural springs or ponds present that need protecting** from livestock access?
- Is there **young encroaching scrub present on grazeable areas that needs removing**?
- Are there **weeds or areas of dense bracken/'ferns' present that need controlling**?
- Is there **past damage that need restoring**, i.e. removing dumped rubbish/spoils?

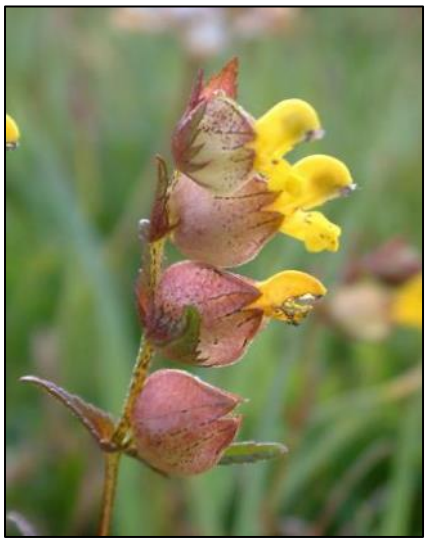
## What are *Burren Lowland Grasslands*?

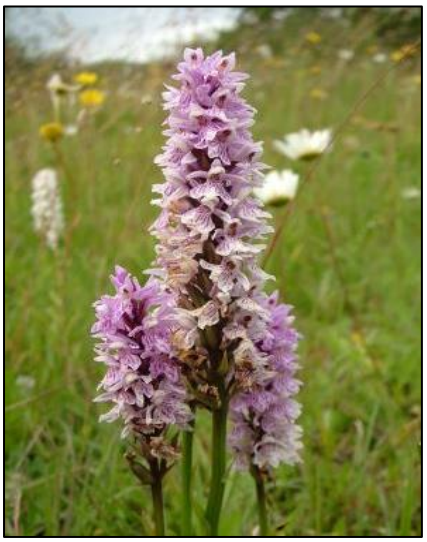
Burren lowland grasslands are a subset of those fields usually described as 'summer-land' or 'green-land', but they differ from improved agricultural grassland in that they contain a greater variety of wild flowers and herbs. These '**meadow-like**' fields have deeper soil than typical winterages, and often have a history of cultivation for crops; but are now mainly used for summer grazing or cut for silage/hay, (a few are used mostly for winter grazing). Many were reseeded and fertilised in the past but have become 'flowery' again after fertiliser application was reduced or stopped. Areas of Burren lowland grassland can also occur within improved fields e.g. on slopes that haven't been reseeded or fertilised.

Note: fields with quite a lot of heather or mountain-avens are classed as heath, and will be scored as winterages (usually more than 25% of the field being covered by heather and associated plants).



*Look out for large ox-eye daisies, yellow rattle and orchids (see below) on any 'meadow-like' fields that you do not fertilise (or only apply very little to) – these may qualify for payment.*





***These Management Guidelines for Burren farmers are designed to complement the Terms & Conditions of the Burren Programme – for more information please visit,*** www.burrenprogramme.com