Phosphorus Reduction Scheme



Arable reversion to zero-input grass

Funding is offered for reverting whole or part fields from arable use (including maize growing) to zero-input grassland. It may also be used to create in-field, cross-slope grass strips to intercept runoff. This measure should be used for fields or areas of fields that regularly flood / get waterlogged or that experience surface runoff and soil erosion. Arable reversion which is funded by any other scheme (such as Countryside Stewardship) or future schemes such as the Sustainable Farming Incentive are not eligible

Key requirements summary: Do <u>not</u> apply any fertiliser or manure. No grazing is allowed, except light grazing by sheep overwinter if desired.

Length of agreement available

2½ to 4½ year agreements available starting in either Spring or Autumn 2023. Longer term agreements may also be available. Please contact the project team for details.

Where to use this measure

- Across whole or part fields, or to create in-field, cross-slope grass strips. This measure
 may be used strategically across slopes, in field corners and at the bottom of slopes
 to slow the flow of water and encourage water infiltration.
- On cultivated land that has been arable cropped (this can include maize) for the past 3 or more years.
- On land that is adjacent to a watercourse (including ditches) or has high connectivity to a watercourse via a road, track, or any other flow pathway.

Where this measure cannot be used

- **Do not** use this measure where evidence exists for rare arable plants / weeds.
- **Do not** use this measure on fields / parcels / strips that have already been taken out of arable production.
- For establishing watercourse buffer strips please refer to the separate Phosphorus Reduction Scheme specification for that measure

Requirements

Establish and manage plots according to the specification set out in the project agreement relevant to each plot. This specification will be specific to each farm and location but will be based on the following:

Establishment

- Assess whether there are any issues of soil compaction and, if necessary, plan appropriate timely cultivations such as subsoiling to resolve these before establishing the new sward.
- If there is a heavy weed burden, spray with a herbicide such as glyphosate before cultivation.
- Establish grass either:
 - o Between 15th March and 31st May 2023, or
 - o Between 15th July and 30th September 2023.
- Autumn (August/September) is a suitable time to establish grass. If you have to establish in spring, then use a higher seed rate.
- Broadcast or drill seed into a firm, consolidated and clean seedbed and then roll or harrow to help ensure good seed to soil contact, retain moisture, and reduce movement of slugs within the soil profile. Direct drilling into stubble is permitted as long as it results in an adequate level of grass establishment (i.e. approx. 80% groundcover by 1st December 2023).
- Sow the species mix and seed rate specified in the project agreement relevant to each plot. General requirements will be:
 - Establish a mixed sward of traditional hay meadow grasses, plus legumes such as clover if desired. Wildflowers and herbs such as yarrow and plantain may also be included. Do not include any Italian or Westerwold ryegrass in the seed mix, or a high proportion of perennial ryegrass.

Cutting and topping

- To control weeds and ensure that a dense sward that reduces runoff is established, in the first 12 months after establishment:
 - plots should be cut or topped regularly (at least 3 times) during the growing season and
 - plots should be topped or grazed at least once during the winter.
- After the first 12 months and once established, cut the sward at least once each year after 1st July. Farmers are encouraged, but not required, to leave small refuge areas uncut (5% of plot area) to provide overwintering habitat for invertebrates. All cuttings must be removed from the field (but not from in-field grass strips).
- Once established, plots should be mechanically topped, or grazed lightly with sheep each winter.
- Top or spot-spray any undesirable plants, such as nettles, bracken, injurious weeds, or invasive non-native species as soon as practically possible to avoid them becoming established.

Inputs and management

- Applications of organic manures are <u>not</u> permitted.
- Applications of inorganic fertilisers (N, P, K) are <u>not</u> permitted.
- Applications of lime are permitted.
- Grazing by livestock is not permitted, except for light grazing by sheep between 1st November and 28th February inclusive. Supplementary feeding (except by energy blocks) is not permitted.
- Pesticide applications are not permitted except for spot-spraying of injurious weeds.

 Maintain the leading edge of in-field cross-slope grass strips, avoid gaps, and prevent trafficking.

Returning the land to agricultural production at the end of the agreement

- Terminate and cultivate the grass sward at a time of year when nutrient loss via leaching and/or surface runoff from the bare soil will be minimised (i.e. in spring / summer / early autumn, and when ground conditions are suitable).
- Establish the following crop as early in the autumn as possible. This is to:
 - ensure that the maximum amount of nutrient released by the grass sward is taken up by the following crop/s. This could involve using cover crops to retain nutrients in following winters.
 - o provide maximum over-winter ground cover to reduce surface runoff.

Restrictions

- <u>Do not</u> include any Italian or Westerwold ryegrass in the seed mix, or a high proportion
 of perennial ryegrass for further details of suitable grass mixes please contact your
 scheme advisor.
- <u>Do not</u> use plots for vehicular access to other fields. Other than essential field operations, plots should never be driven on for access, turning at headlands or any other purpose.
- <u>Do not</u> apply any organic manures or inorganic fertilisers to the reverted area, or prior to its establishment.
- **Do not** use pesticides, except for herbicides to spot-treat or weed-wipe to control nettles, bracken, injurious weeds, or invasive non-native species.
- **Do not** allow pesticides and fertiliser to drift into the margins and grassed down areas.
- **Do not** allow the soil P index to rise during the duration of the agreement.
- <u>Do not</u> graze at any time with any type of livestock, except for light grazing by sheep between 1st November and 28th February inclusive.
- **Do not** supplementary feed sheep, except by energy blocks.
- After the first 12 months, <u>do not</u> cut before 1st July in any calendar year and avoid cutting when soil is wet to reduce soil damage and avoid disturbing ground nesting birds and their nests in the breeding season
- Once established, <u>do not</u> plough, cultivate or re-seed until the end of the term of the agreement.

Record keeping and payment terms

Agreement holders will need to keep the following records and supply them with *the payment claim* each year. Payment will only be made upon satisfactory receipt of all of the following records:

- Photographs of the plots before establishment (only required for first payment claim).
- Photographs of each reverted area.
- Invoices showing the seed mix used to establish the sward (only required for first payment claim).
- Soil analysis results (pH, P and K as a minimum) for the relevant fields dated within the past 3 years (only required for first payment claim).
- Farm and field information needed to run a phosphorus loss tool for the farm and calculate the reduction in phosphorus loss to water arising from this work. This will

include farm data relating to livestock numbers, crop areas and fertiliser and manure inputs.

- Self-declaration that the terms of the project agreement have been adhered to (submit annually key terms are listed above).
- Successful applicants are required to sign a declaration confirming that:
 - reasonable precautions are taken to prevent nutrients and soil from the relevant field entering watercourses or from being leached to groundwater to an extent that could cause pollution.
 - the relevant fields have <u>not</u> been (i) the source of a recorded pollution incident which could have been prevented by the farmer taking reasonable precautions to prevent that pollution and/or (ii) the subject of a warning, fine, prosecution or BPS deduction issued to the farmer by the Environment Agency or RPA for a breach of NVZ rules or Farming Rules for Water in the past 5 years.
- It is expected that to support and inform the above declaration, successful applicants will complete the Environment Agency's Agricultural Compliance Tool (ACT) by 31st December in each year of the agreement and submit it when completed to Wessex Water (who will hold it in confidence) and address any actions identified by the ACT. For agreements involving annual payments of more than 5 years duration and/or with a value in excess of £5,000 of annual payments, this is a requirement.
- Agreement holders are required to complete a Wessex Water supplier application form in order to receive their first payment. A copy of this is available on the scheme website.
- Agreement holders will need to keep the following records and supply them on request.
 - o Field operations at the field parcel level, including associated invoices

Additional Information

Championing the Farmed Environment: Advice on reverting arable land to grass - https://www.cfeonline.org.uk/advice-training/arable-land-reverted-to-grass/

Forest Research: Wildflower meadow creation and management in land regeneration - https://cdn.forestresearch.gov.uk/2022/02/bpg_15.pdf

RSPB: https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/farming/advice/managing-habitats/hay-meadows/

Save our Magnificent Meadows:

http://www.magnificentmeadows.org.uk/assets/pdfs/Hay meadow and pasture management.pdf





Hay meadow above Blagdon Lake



This measure can also be used to create in-field wildflower/grass strips in arable fields, like this 8m wide strip. The outer 2m on each side are sown with grass and the inner 4m sown with wildflower/herb mixes. Pictured in September 2020 after establishment in spring 2020 and after frequent and tight mowing through summer 2020 to suppress weeds. Strips run across slope with tramlines and are spaced every 100m to encourage beneficial insects into crop. Strips also include electricity poles to facilitate field operations.

Photo credit: John Martin.