

Hedgerow Rejuvenation Measure

The objective of this measure should be to select hedgerows in poor / declining condition that have historical, ecological, or landscape significance and restore them to favourable condition status by rejuvenation of existing plants and, where necessary, the introduction of new plant material.

In order to prioritise resources the measure needs to be designed to ensure that appropriate hedgerows are targeted and that the actions carried out show a measured improvement in the condition (quality) of the hedge.

The Hedgerow Appraisal System can be used as the basis for appropriate hedge selection and condition scoring.

Selecting appropriate hedges

This is a two step process:

Step 1 – Identify those hedges on the farm that meet the “significance” criteria

Step 2 - Determine if those hedges will benefit from rejuvenation

Significance criteria

To qualify for this Measure a Hedgerow must either

- a) Form part of a Farm, Townland, Parish or County Boundary
- b) Be recorded as a boundary on the First Edition Ordnance Survey
- c) Connect to a feature that is recorded on the Sites and Monuments Register (SMR)
- d) Contain (on average) at least 8 appropriate species of Tree/Shrub/Climber (from list) per 30m of hedge
- e) Contain at least 6 species of woodland indicator ground flora (from list) per 30m of hedge
- f) Form an active link or connect with either
 - 1) A designated area
 - 2) Woodland or forest
 - 3) A minimum of 3 other natural or semi natural habitat types (including other hedgerows) *provide ecological continuity or connectivity*
 - 4) Be in an area covered by a Landscape Designation
 - 5) Have some other feature which could be considered to make the hedgerow significant either historically, ecologically or in terms of the visual landscape.

(In reality planners will find that some of these conditions are very straightforward to apply and may only need to look in to the more detailed aspects if a particular hedge that a farmer would like to include doesn't fall in to the "easier" categories)

and the hedgerow must meet the Condition Assessment Criteria

Ideally the planner should carry out a full condition assessment of the hedge using the HAS which would give a condition score for the hedge. *A simplified version with an example is shown in the Appendix.*

As a minimum the following information should be recorded; Average Height, Average Width, Basal Density and linear continuity (gaps) to best fit categories and an assessment of the native tree and shrub species composition (as a proportion of hedge volume e.g. > 90%).

Condition Assessment Criteria

- **Height** - for Hedge Laying the hedge must have an average height of at least 2.5m
- **Linear Continuity (gaps)** >10% gaps or have an individual gap >5m or
- **Basal Density** - have an open base (excluding briars & brambles)
- **Species Composition** – be comprised of 90% + (by volume) of native species (from list)

A hedge for coppicing can contain less than 90% native species provided that it will contain that proportion or above once the rejuvenation / infill work is completed.

- **Be sufficiently healthy as to benefit from rejuvenation**

Determining the suitability of a particular hedge for rejuvenation requires experience. Some hedges will be unsuitable for laying but will coppice adequately, others may have declined to such an extent that they are beyond rejuvenation and should be left alone.

This sounds vague but emphasises the need for suitably experienced people making the judgement.

The planner should specify the length of hedgerow to be rejuvenated and the method by which this should be achieved.

Hedge Laying

Coppicing

Combination of Laying and Coppicing (approx % of each) – *just a suggestion*

Where the density of hedgerow stems is less than 2 plants per metre infill planting will be required.

Laying should be considered to be the preferred method of hedgerow rejuvenation as a laid hedge has greater biodiversity value than a coppiced one since it provides some cover, retains old wood and there is no loss in the continuity of the ability to flower and fruit.

The planner should make a photographic record of the hedge prior to the commencement of work.

Compliance

Hedge laying should be carried out to a standard at least equivalent to City & Guilds AO20.

Coppiced stumps must be cleanly cut with a sloping cut no higher than 4" above soil level. The bark below the cut should not be damaged.
(A clear standard needs to be specified. - The Coppice Association should advise).

Infill planting should contain a minimum of x plants per metre. Species should be from the appropriate species list (see Hedgerow Appraisal System) and be of certified native provenance.

(Temporary) fencing must be erected to protect coppiced stumps / infill planting. This must be a minimum of 1m from the edge of the hedge and must be properly maintained for a minimum of x years.

Monitoring

Monitoring will involve checking the initial condition assessment score of the hedge with the condition assessment score a suitable period after the work has been completed. An increased score will reflect an improvement in the general ecological condition of the hedge.

The planner / Inspector should make a photographic record of the hedge subsequent to any maintenance / improvement works.

Issues / Problem Areas

Pricing

The price of hedge laying work varies widely (by a factor of 3-4 times) dependent on numerous factors including the initial condition of the hedge, presence of old wire/ staples, amounts of ivy, species composition, etc. A fixed per metre price doesn't work well for hedge laying. The fairest way would be for hedge laying work to be funded on a cost basis, failing that a tiered level of payments should be available which reflects the degree of difficulty involved for the particular hedge.

Fencing

The (temporary) fencing of coppiced hedgerows, infill planting and in some cases laid hedgerows needs to be factored in to the funding for the measure.

Standards

To be effective, standards of work need to be taken in to consideration. Those implementing the plan need to be sufficiently skilled as to produce professional quality work. Planners / Inspectors need to be able to distinguish between professional and unprofessional standards of work (*you would agree that the taxpayer, through the Department shouldn't be subsidising sub standard work?*).

Skill set of the Planner

It has been the experience of HLAI members that some (many?) of the planners for REPS and AEOS have not been sufficiently experienced as to be able to correctly identify either

appropriate hedges for rejuvenation or the appropriate method for rejuvenation given the prior condition of the hedge. This needs to be addressed in the new scheme.

Aftercare

The success of major rejuvenative surgery is not instantly achieved. Follow up work, or aftercare, needs to be done to ensure the success of the operation. This could include (temporary) fencing to protect from livestock, control of vegetation for a number of years until growth from plants is re-established, and/or formative pruning. This is difficult to cost but is necessary work.

Timeframe of Scheme

Hedgerow Management is a cyclical process. The environmental benefits of major hedgerow surgery are not immediately apparent and major interventions such as coppicing and laying can have some short term negative impacts for the longer term benefits of improved hedge structure and sustainability. This is difficult to account for in the 5 year period that has been the norm for scheme participation.

Hedgebanks

The foundation for many hedges is a hedgebank; it is not uncommon for these banks to be degraded by weathering or stock damage. Rejuvenating hedge plants without ensuring a sound foundation is a false economy. Reparation of hedgebanks should be costed and included in the new scheme.

Funding Model (*an idea*)

In Agri-Environment Schemes in this country Irish and European taxpayers are funding a programme of work and actions that are being carried out on private (farmed) land for the overall good of the people of the country and Europe and for the wildlife and general ecology of the countryside as a whole. In all other aspects of current and past grant funding by the Department - Afforestation, Farm Buildings, Tanks, Equestrian Arenas, Fencing, etc standards apply. Taxpayers have a right to see professional standards applied to the types of farm conservation work carried out under Agri-Environment Schemes. For professional standards to be met professional rates of pay must be available to people producing a professional standard of work. Also, this means that the skill set of the administrators of the Scheme must include a knowledge of and recognition of those standards.

Obviously farmers need to be suitably recompensed for facilitating this programme of work, but this is one aspect where we feel that the structure of this particular Measure in REPS and AEOS has lacked fairness. Farmers adopting this Measure have been paid a fixed amount per metre of hedgerow adopted in the plan (x). To carry out the necessary work and ensure compliance, they will have to spend an amount (y) which will vary dependent on the condition of the hedge leaving a net income (z) which will vary significantly from farmer to farmer for an equivalent length of work undertaken. In order to maximise the net income the natural tendency is for farmers to spend the minimum amount necessary (y) to ensure compliance. In the absence of any qualitative standards this leads to a lowest common denominator approach. An approach which would lead to more consistency in both payments and in standards of environmental management is to decouple the payment for the work done from the recompense to the farmer. The farmer

receives a standard payment per metre for facilitating the hedgerow works to be undertaken on his/her land. Once the work is completed to a satisfactory standard the undertaker of the work claims the agreed level of payment from the Department.

Benefits

- the farmer knows precisely his/her net income from the measure
- the farmer is not under threat of penalty providing he / she does not undermine the work done through other activities.
- farmers who can produce a professional standard of work can supplement their income by acting as contractors. Training should be provided to this end.
- the responsibility for work undertaken shifts to the contractor – professional contractors should have nothing to fear from this.
- targeted hedge rejuvenation to professional standards will result in improved hedgerow habitats meeting the environmental component of the scheme.
- More work for the Department – no pain no gain!

Decoupling the recompense for the farmer from the work undertaken should not mean that the farmer is discouraged from participating fully in developing the plan for the farm.

The problem is in balancing the payments fairly between all parties (dividing the pie).

Rejuvenation versus New hedge planting

We feel that hedgerow rejuvenation should be prioritised in the new scheme over the planting of new hedgerows. Hedgerow surveys indicate that fewer than 20% of hedgerows meet favourable condition criteria. It is questionable as to whether the Department should be subsidising the planting of more hedges when the majority of existing hedges are not being managed adequately. Improving the condition of the existing resource is preferable from a biodiversity perspective as these hedges already have a developed ecology.

Appendix

Criteria for condition scoring of hedgerows (adapted from HAS).

Structural Variables	0	1	2	3	
	Unfavourable	Adequate	Favourable	Highly favourable	
Height (K)	<1.5m	1.5 – 2.5m	2.5 – 4m	>4m	
Width (L)	<1m	1 – 2m	2- 3m	>3m	
Basal density / porosity to light of woody shrubs? (N)	Open	Semi-translucent	Semi-opaque	Opaque / Dense	
Continuity	0	1	2	3	
	Unfavourable	Adequate	Favourable	Highly favourable	
% gaps (M)	>10%	5-10%	<5%	Continuous	
Specific gaps (M1)	> 1 Gap > 5m	1 gap <5m		No gaps >5m	
Species Diversity Significance	0	1	2	3	4
	Low Significance	Slightly Significant	Moderately Significant	Significant	Highly Significant
Tree / Shrub / Climber Species Count (Floristic) (All species)	(1-3 species / 30m strip)	(4/5 species / 30m strip)	(6/7 species / 30m strip)	(8/9 species / 30m strip)	(10+ species / 30m strip)

The Condition Score for the hedge is given by accumulating the individual scores from the six categories.

e.g.	Hedge Height	3m	Score 2	Potential score after laying	Score 1
	Hedge Width	2m	Score 2	Potential score after laying	Score 0
	Basal Density	Open	Score 0	Potential score after laying	Score 3
	% gaps	>10%	Score 0	Potential score after laying	Score 3
	Specific Gaps	No gaps >5m	Score 3	Potential score after laying	Score 3
	Species Count	7	Score 2	Potential score after laying	Score 2
			Total 9	Potential score after laying	Score 12 *

** this could rise to 15 as the hedge increases in height and width as it re-grows over the next couple of years – (provided it receives appropriate aftercare)*