



Hedgerows

Slowing water



Description

Hedgerows are an intrinsic part of the landscape. Hedges can be used to control run-off, they intercept water and transported sediments by acting as a permeable barrier to water flowing overland. This slows the water and increases infiltration into the soil. The sediment load is trapped by the hedge, preventing the sediment entering watercourses.

Design

A new hedge should be planted in a double, staggered row with 5-6 plants per metre. Double fencing should be used to exclude livestock whilst the plants establish and guards are then used to protect the plants. Planting should be done between November and March. A mix of native species is ideal for hedge planting, and beneficial for wildlife. Where possible use locally grown seed stock.

Particular locations to plant hedgerows for flood management are at the bottom of steep slopes, areas prone to run-off and adjacent to rivers and streams. A SciMap model can be used to identify high risk run-off pathways.

Considerations and benefits of Hedge Planting

1. Hedgerows provide shelter and shade for livestock
2. Planting of hedgerows to link existing habitats can create wildlife corridors
3. Larger tree species could be planted at intervals to further increase habitats and shelter provision
4. Hedgerows could be planted on raised banks which further act to hold water back
5. Reduces localised compaction
6. Hedgerows are a good long-term boundary for use in both livestock and arable farming
7. Understory plants could be planted to further benefit wildlife, such as primrose, common vetch and yarrow
8. Hedgerows and buffer strips can be used together to sub-divide large fields prone to soil loss.

Suggested species mix

Hawthorn (70%)	Crab apple
Holly	Bird cherry
Hazel	
Guelder Rose	
Blackthorn	

Consents and grants

- There are no specific consents required for hedge planting.
- There are several funding opportunities; Countryside Stewardship, Woodland Trust etc

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Contour Hedges

Contour hedging is planting hedgerows following the contours of the land, particularly in areas prone to run-off, such as natural gullies. The hedge intercepts the run-off and sediment it carries, increasing infiltration and preventing sediment entering the waterbody. Materials, equipment and cost:

**Materials required:**

Trees (refer to species mix)
Stakes and guards

Equipment required:

Tree planting spade
Lump hammer

Estimated cost:

(Per metre, excluding fencing)
£7.50 per metre



Banked Hedges

Planting the hedge on an earth bank could further hold back water, delaying flood peaks. Similar to beetle banks the banked hedge will create an overwinter habitat for beneficial insects. Building hedges on an earth or stone faced bank can create a more efficient wind break.

The bank could be between 0.5- 1.5 metres high and 1.5–2 metres wide, created by piling up local soil and stones.

The bank should be sown with a grass and wildflower seed mix to prevent bare earth and potential soil loss. The bank could also be faced with stone. The hedge should then be planted on top of the bank, as described above.

Materials required:

Trees (refer to species mix)
Stakes and guards

Equipment required:

Tree planting spade
Lump Hammer
Digger for mounding

Estimated cost:

(Per hectare, excl fencing)
£10 per metre

Maintenance (Low)

- New hedges require annual maintenance until they are established, approximately 1.5m tall.
- Laying the hedge will improve its health and prevent holes, recommended every 12-15 years
- Guards to be removed once the plants have established
- Vary the height of the trimmed hedge
- No cutting between 1st March - 31st July

Links and resources

Hedge Link: <http://www.hedgeline.org.uk/index.php>

The English Hedgerow Trust: <http://www.hedgerows.co.uk>

National Hedge Laying Society: <http://hedgelaying.org.uk>