

Agroforestry Design Template

Hedgerows

Farm hedges have a long history on UK farms, field and farm boundaries are traditionally marked by hedges. A thick boundary hedge offers biosecurity for livestock farmers and favorable cropping conditions for arable farmers. Well sited hedges like shelterbelts are great at providing shelter for livestock and crops in neighboring fields. Properly designed and maintained hedgerows offer many benefits for biodiversity on a farm, as well as providing food and shelter they can act as an important biodiversity highway, connecting important habitats across a farm. Lastly hedgerows can be a productive element of the farm providing livestock browse and even firewood or woodchip for livestock or even renewable heating or energy generation.

Design Applications: Livestock Shelter, Crop shelter, habitat connectivity, Farm biosecurity, shelter & food for biodiversity.

Hedges left to grow for 3+ years.

Will give better shelter to crops, livestock and wildlife. Increased biodiversity value through increased flowering & fruit availability

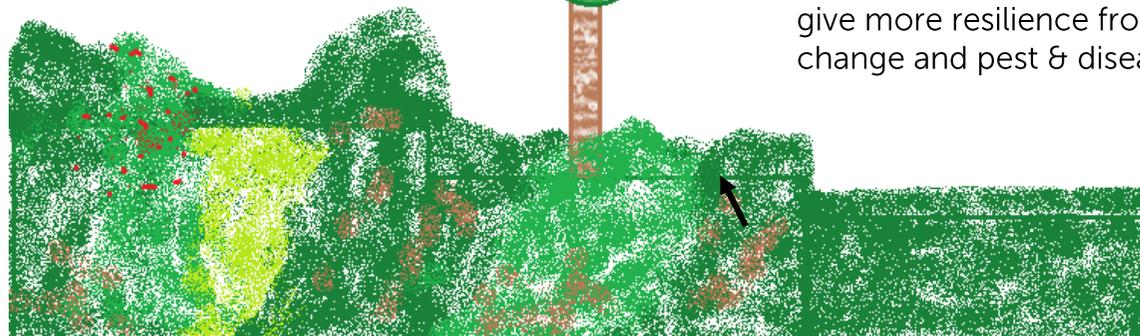


Hedgerow trees

Ideally every 20 meters and let to grow into maturity.

Traditionally these trees are cut on a 25-year pollard rotation to produce firewood and timber for the farmer.

A diverse tree species mix will give more resilience from climate change and pest & diseases.



What to consider when placing this design in Landscape



Hedges for Biosecurity

A thick boundary hedge system can play a crucial role in limiting nose to nose contact of livestock across farm holdings. This is particularly important for livestock farmers in areas of high TB risk. For arable farmers a thick boundary hedge will provide more favourable growing conditions, by reducing wind speeds. This also positively reduces soil erosion risk.

Hedges for Connectivity



Healthy biodiversity plays an important role in all agricultural systems. Functional ecosystems offer farms many benefits including pest predation, increased pollination, Increased water infiltration and healthier livestock. For these ecosystem services to be most effective they need to be encouraged around the farm and out into the fields. Most farmers can show an area of their farm that has increased biodiversity levels, the inclusion of and hedges management plays a crucial role in moving biodiversity around the farm.

Examples of Species composition tables

Design Layer	Example Species	Planting distance
Hedging species	Hawthorn (<i>Crataegus monogyna</i>) Holly (<i>Ilex aquafolium</i>), Hazel (<i>Corylus avellana</i>), Blackthorn (<i>Prunus spinosa</i>), Sea Buckthorn (<i>Hippophae rhamnoides</i>), Elder (<i>Sambucus nigra</i>),	Hedging whips planted at 30cm spaces
Hedge row Trees	Oak (<i>Quercus</i>), Alder (<i>Alnus glutinosa</i>), Willow, Poplar, Lime, Alder (<i>Alnus glutinosa</i>), Willow Spp. (<i>Salix sp.</i>) Field Maple (<i>Acer campestre</i>), Wild Pear (<i>Pyrus communis</i>), Crab Apple (<i>Malus Sylvestris</i>)	Ideally hedgerow Trees at 20-meter intervals