

Appendix 3 Planting information and implementation

| Orchards (traditional and alternative) | Broadleaf, deciduous woodlands | Shrubs | Wildflower Meadows | Grass mixes | Coppices | Hedgerows | Pond planting |
|--|--------------------------------|--------|--------------------|-------------|----------|-----------|---------------|
|--|--------------------------------|--------|--------------------|-------------|----------|-----------|---------------|

| Objective of proposed planting type | | | | | | | | | | | | | | | |
|---|-------------------|---|----|---|-------------------|---|----|---|--|---|----|---|----|---|--|
| To create areas of orchard for amenity, public enjoyment, to reflect the historic land use in the area and to interpret this for education. | | To provide screening, opportunities for recreation and nature conservation. To restore woodland and woodland edge habitats. | | To act as screening between properties and pathways and provide habitat buffer zones. | | To add colour and diversity of habitat and to provide visual link to past agricultural practices. | | To reflect historical agricultural land uses. | | To provide an alternative variation of habitat to encourage diversity of plant and animal species and to keep vegetation low under power lines. | | To further promote the character of the AONB and to provide an important habitat for wildlife. To retain historic character and landscape features. | | To promote water based habitats, and provide transitional planting.. | |
| Indicative species mixes (numbers represent percentages of the mix) | | | | | | | | | | | | | | | |
| Walnut | 40 | Species | 1 | 2 | Species | 1 | 2 | Only use seeds that are: <ul style="list-style-type: none"> Guaranteed UK provenance Suitable for local soils Suitable for lowland use Sourced from an approved supplier for example: Emorsgate or BSH Suggested species: Yarrow Kidney Vetch Knapweed Greater and Common) Wild Basil Wild Carrot Small and Field Scabious Meadow Buttercup Lady's Bedstraw Rough Hawkbit Oxeye Daisy Birdsfoot Trefoil Wild Marjoram Burnet-saxifrage Hoary Plantain Cowslip And should include a proportion of wild grasses such as Crested Dogstail, Sheep's Fescue, Slender Creeping Red Fescue and Smaller Cat's-Tail | Only use seeds that are: <ul style="list-style-type: none"> Guaranteed UK provenance Suitable for local soils Suitable for lowland use Sourced from an approved supplier for example: Emorsgate or BSH Suggested species: Quaking Grass Crested Dogstail Sheep's Fescue Slender Creeping Red Fescue Crested Hair-grass Smaller Cat's Tail Yellow Oat-grass | Sweet Chestnut | 45 | Field Maple | 4 | Willow and Black Poplar to be planted in wetter areas. Native aquatic plants to be planted. Preferably, pond plant cuttings to be taken from a local pond. | |
| Hazel | 40 | English Oak | 18 | 10 | Field Maple | | 7 | | | Silver Birch | 5 | Hazel | 4 | | |
| Crab Apple | 10 | Ash | 14 | | Hazel | | 5 | | | Hazel | 35 | Holly | 4 | | |
| Wild Cherry | 10 | Sweet Chestnut | 14 | 20 | Holly | 8 | | | | Blackthorn | 5 | Crab Apple | 4 | | |
| Traditional orchard species are to be advised by The Brogdale Trust | | Silver Birch | 10 | 6 | Crab Apple | 1 | 5 | | | Spindle | 5 | Wild Cherry | 4 | | |
| | | Field Maple | 5 | 5 | Wild Cherry | 1 | 5 | | | Guelder Rose | 5 | Wayfaring Tree | 5 | | |
| | | Hornbeam | 5 | 10 | Hawthorn | 35 | 9 | | | Hawthorn | | Hawthorn | 25 | | |
| | | Hazel | 1 | 10 | Dogwood | 10 | 18 | | | Dogwood | | Dogwood | 5 | | |
| | | Holly | 1 | 1 | Black-thorn | 19 | 15 | | | Blackthorn | | Blackthorn | 25 | | |
| | | Crab Apple | 1 | 1 | Spindle | | 10 | | | Dog Rose | | Dog Rose | 5 | | |
| | | Wild Cherry | 1 | 1 | Dog Rose | 20 | 10 | Guelder Rose | | Guelder Rose | 5 | | | | |
| | | Small-leaved Lime | 5 | | Guelder Rose | | 10 | Purging Buckthorn | 2 | Purging Buckthorn | 5 | | | | |
| | | Poplar | 5 | 5 | Purging Buckthorn | 2 | 2 | Alder Buckthorn | 2 | Alder Buckthorn | 5 | | | | |
| | | Wayfaring tree | 2 | 2 | Alder Buckthorn | 2 | 2 | Wild Privet | 2 | | | | | | |
| | Wild Service Tree | 2 | 2 | Wild Privet | 2 | 2 | | | | | | | | | |
| | Goat Willow | 2 | 2 | | | | | | | | | | | | |
| | Whitebeam | 2 | 2 | | | | | | | | | | | | |
| | Larch | 2 | 2 | | | | | | | | | | | | |
| | Scots Pine | 2 | 2 | | | | | | | | | | | | |
| | Douglas Fir | 2 | 2 | | | | | | | | | | | | |
| | Hawthorn | 3 | 7 | | | | | | | | | | | | |
| | Blackthorn | 3 | 7 | | | | | | | | | | | | |
| | Spindle | | | 3 | | | | | | | | | | | |

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|---|--|---|--|---|---|---|---|
| Implementation techniques | | | | | | | |
| Traditional: 10m x 10m spacing in formal arrangement Alternative: informal arrangement and varied spacing. Wildflower and grass mix to be sewn inbetween trees. | Planting in curved rows at 2800 trees per ha. Low growing grass sward seeded over area with trees planted into it. Where a soil plough plans exists, sub soils will be broken to below 40cm to break it. Trees and shrubs to be protected in blocks with post and wire rabbit proof fencing or individually with tree and shrub guards depending on location. | Planting in curved rows at 2800 trees per ha. Low growing grass sward seeded over area with shrubs planted into it. Shrubs to be protected in blocks with post and wire rabbit proof fencing or individually with tree and shrub guards depending on location. | Seeding to occur in autumn following advice from specialist consultant. Soil inversion techniques will not be used. | Seeding to occur in autumn following advice from specialist consultant. Soil inversion techniques will not be used. | Planting in curved rows at 2800 trees per ha. Low growing grass sward seeded over area with shrubs planted into it. Plants to be protected in blocks with post and wire rabbit proof fencing or individually with tree and shrub guards depending on location. | Double rows planted in staggered arrangement. Plants to be protected in blocks with post and wire rabbit proof fencing or individually with tree and shrub guards depending on location. | The best planting time for planting aquatic planting is Spring. |
| Estimated heights at year 40 (year 0 = max 2m high) | | | | | | | |
| Traditional: approximately 5m maximum Alternative: Approximately 10m maximum. | Approximately 10-15m | Approx 3 – 5m | Field layer | Field layer | Approx 5m | Approx 3m | 2m to 15m |
| General management principles and maintenance machinery | | | | | | | |
| Chemical use will be restricted to control infection that will either cause serious loss of trees or growth, or will cause problems with neighbouring orchards. This will be applied as a spot treatment. | Band spray (along rows, not inter-row) with contact herbicide in November. Apply residual treatments in Winter. Apply contact if required in summer during years 1-3 as required. Mow in-between planting rows if required. Spraying to be applied by hand or using very low key machinery (quad bike). | Band spray (along rows, not inter-row) with contact herbicide in November. Apply residual treatments in Winter. Apply contact if required in summer during years 1-3 as required. Mow in-between planting rows if required. Spraying to be applied by hand or using very low key machinery (quad bike). | Management practices to follow suppliers' instructions. Likely that mowing will be cut annually in Autumn to allow seeds to develop as food for birds and as new flower resource. Cutting shall take place using a tractor or other standard agricultural machinery. | Management practices to follow suppliers' instructions. Likely that mowing will be cut two to three times per year or as required. Cutting shall take place using a tractor or other standard agricultural machinery. | Chestnut to be coppiced on approximately a 15 year cycle. Hazel to be coppiced on a 5 year cycle. Coppicing likely to be undertaken by volunteers or similar. | To be cut as required, paying particular attention to road edges. Within the site, growth will be less rigorously controlled. All hedgerows will be cut using a tractor. | Cut for either wildlife value or amenity value as required. |
| Proposed pest control measures | | | | | | | |
| Tree guards | Larger areas rabbit fenced (more economical), or where vandalism is expected., fence approx. 1.3m high. Spirals and canes to prevent hare damage in smaller blocks (0.75m spirals). We may alter this slightly, but there will be some mix of the two methods. Deer are not an issue on this site. As per broadleaf trees | As per broadleaf trees. | None | None | As per broadleaf trees. | Spirals and canes | As required. |