

Swanage Green Infrastructure Strategy

APPENDIX 3 - Plants to attract birds, butterflies and bees



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Plants to attract birds

To attract a variety of different species it is also important to take into account their different eating habits. Some birds feed in the lower parts of shrubs, others in the canopy of trees, while others prefer to feed on the ground. Therefore the greater the range of different shapes and sizes of plants the more successful the scheme will be at bringing a number of different birds in. Proper application of this principle is a more important factor in attracting birds than the size of the space you are working with.

Trees that produce berries and/or seeds, or that attract insects will also attract birds. Berry or fruit bearing trees and shrubs will attract members of the thrush family, blackbird, fieldfare, mistle and song thrush, redwing and robin. Also starlings and, in some winters, waxwing and even some warblers, e.g., blackcaps who eat berries in the early autumn before they migrate. Unless mentioned, the berries attract all the above birds plus others as specified.

The following lists are not exhaustive, but do give an indication of the main types of trees and shrubs that will provide the food sources and shelter necessary to attract birds into a space. It is always best to plant native trees where possible, but this is especially true on rural development sites, as native planting will help to supplement native vegetation that may have been lost through the development of the site.

Trees

Alder *Alnus* spp. Medium sized trees usually found on damp ground. The seeds are attractive to many birds. *A. glutinosa* common (native) alder. *A. incana* grey alder. Flourishes on infertile soil which it soon enriches. *A. cordata* Italian alder. Tolerates dust laden atmospheres. Suitable for planting as a street tree.

Beech *Fagus* spp. Large tree producing nutlets that are attractive to birds and mammals. *F. sylvatica* native, common beech. *F. sylvatica* 'Dawyck' upright form suitable for avenues and as street trees. *F. sylvatica* 'Purpurea' copper beech.

Birch *Betula* spp. Medium sized tree that produces seeds which many birds feed on. *B. pendula* native silver birch. *B. jacquemontii* white barked Himalayan birch. Stunning white bark makes this a useful feature tree.

Cherry *Prunus* spp. Bright red fruits attract birds in July. Medium trees, with white blossom in spring. *P. avium* Gean, mazzard or wild cherry – native tree. *P. avium* 'Plena' beautiful double flowered version of the wild cherry. *P. padus* bird cherry – native tree, usually smaller than

the wild cherry. Often planted as an ornamental tree.

Cotoneaster spp. *C.* 'Afterglow' small weeping tree. White flowers late spring and red berries in autumn. *C. franchetii* white flowers in spring. Red foliage and red berries.

C. frigidus Himalayan tree cotoneaster *C.* 'Hybridus Pendulus' small tree with arching branches, pink flowers in late spring and red berries.

Ornamental crabs *Malus* spp. Fruit in the Autumn. Small tree. *M. sylvestris* native crab apple. *M. floribunda* crimson buds open white in spring, small red/yellow fruit.

M. 'Golden Gem' white blossom, and small yellow fruit. *M.* 'Gorgeous' pure white blossom in spring, glossy red fruit. *M.* 'Pink Cloud' single white blossom in spring and bright pink fruit. *M.* 'Red Sentinel' white spring blossom, and large clusters of deep red fruit. *M.* 'Royal Beauty' weeping. Copper red young foliage, turns dark green. Deep pink blossom in spring and dark red fruit. *M.* 'Rudolph' large single pink blossom in spring, fresh purple/green foliage. *M.* 'Sun Rival' semi weeping. Spring blossom, pink turning white. Bright red fruit.

Hawthorn *Crataegus* spp. *C. monogyna* native may or quickthorn. White flowers in May and red berries in autumn. *C.* 'Crimson Cloud' Crimson red flowers with white centres in spring. Small red fruit. *C. orientalis*. Grey foliage, creamy white flowers in spring. Red/yellow haws. *C.* 'Paul's Scarlet'. Dark green foliage with double pinky red flowers in spring. Red haws. *C.* 'Rosea Flore Pleno'. Double pink flowers in spring and red haws.

Holly *Ilex* spp. Red, orange or yellow berries - red berries preferred. Need one male and one female plant in order to fruit. Note berries are poisonous to humans. Caterpillars of the holly blue butterfly feed on the leaves, and in turn attract insect eating birds. If allowed to grow to maturity holly can grow into a medium sized pyramidal tree. Not all varieties bear berries. Variegated varieties not suited to rural locations. *I. aquifolium* native. Grows everywhere except on wet soils. Good for hedging.

Juniper *Juniperus communis*. The common juniper is a native large bush/small tree. Dark purple berries ripen in the second year and attract many species of bird.

Larch *Larix* spp. A large tree that requires plenty of light and space. The seeds born in cones are attractive to birds and small mammals. *L. decidua*. European larch. *L. x eurolepsis*. Hybrid larch, which is less susceptible to disease than the European larch, and can be planted in poorer soils.

Lime *Tilia* spp. Large tree with fruits that are attractive to birds. The flowers are full of nectar and are highly attractive to bees. See above under trees useful to bees for a species list.

Mountain ash or rowan *Sorbus aucuparia*. Also known as the mountain ash the rowan has an

abundance of cream coloured flowers in May-June that attract insects and insect feeders. Red berries begin to ripen in August and are irresistible to birds like thrushes and blackbirds. Small tree. *S. aucuparia* 'Asplenifolia' has deeply toothed and lobed fern like leaves. *S. aucuparia* 'Beissneri' is upright, with deeply divided yellow-green leaves. *S. aucuparia* 'Edulis'. Larger leaves and fruit. *S. aucuparia* 'Chinese Lace'. Red/ purple foliage in autumn with dark red fruits.

Oak *Quercus* spp. An Oak tree is an ecosystem in its own right, supporting more insects and other creatures than any other plant. The insects attract insect feeders such as birds and bats. Even in the winter the oak supports many forms of life. Insect larvae hibernate in the bark. Large tree. *Q. patrea* sessile oak. Native to the wetter and less fertile upland regions of northern and western Britain *Q. robur* English or common oak. Native. *Q. ilex* holm oak. Suitable for planting in coastal environments.

Scots pine *Pinus sylvestris*. Large tree. Cones contain seeds that are attractive to birds and mammals.

Whitebeam *Sorbus* spp. Small to medium sized trees bearing berries that attract birds in the autumn. *S. aria* 'Lutescens'. Russet/gold autumn foliage, orange-red berries, young foliage creamy white, small white spring blossom *S.* 'Eastern Promise'. Excellent autumn colours, deep pink berries. *S. huphensis* 'Obtusa'. Bright red autumn foliage and contrasting dark pink berries. *S.* 'Pink Pagoda'. Green/ blue leaves turn excellent autumn colours. Clusters of pink berries in winter.

Yew *Taxus baccata*. Common or English yew. Red waxy fruits attract birds. Large shrub or small tree. Excellent for hedging, but clippings must be disposed of carefully as are toxic to animals. Seeds in fruit are poisonous to humans.

Shrubs

Chokeberry *Aronia arbutifolia* bright red fruits.

Barberry *Berberis* spp. Most forms have black/purple berries, especially loved by blackbirds.

Callicarpa 'Profusion'. Bright violet coloured berries.

Dogwoods *Cornus* spp. Blue tinted white berries but not *C.Mas*.

Cotoneaster spp. Prolific red, orange or yellow berries - birds often choose red first, through orange to yellow last. Note berries are poisonous to humans.

Firethorn *Pyracantha* spp. Red, orange or yellow berries. Select red for the birds to eat before Christmas usually with orange or yellow to follow in a hard winter.

Elder *Sambucus* spp. Red or black berries - over 32 species reported eating them, especially blackcap and occasionally collared doves.

Fruit bushes – blueberry, raspberry etc.

Guelder rose *Viburnum opulus*. Native. Translucent berries.

Japonica or flowering quince *Chaenomeles* spp. Autumn quinces.

Spindle *Euonymus europaeus*. Native large shrub or small tree. Large bright red fruits which open to emit orange red seeds. Note berries are poisonous to humans.

Holly *Ilex* spp.

Honeysuckle *Lonicera* spp. Climbing varieties have red or black berries that attract thrushes, bullfinches and marsh and willow tits. Note berries are poisonous to humans.

Ivy *Hedera helix* spp. Climber or groundcover. Produce shiny black berries on older growth.

Old man's beard *Clematis vitalba*. Climber. Seed heads are enjoyed by many birds

Oregon grape *Mahonia* spp. Decorative black berries. See under shrubs useful to bees for varieties.

Rose *Rosa rugosa*. Has large red hips, particularly attractive to greenfinches which pick out the seeds.

Perennials

Betony *Stachys officinalis*. Native. See front cover for picture.

Bird's foot trefoil *Lotus corniculatus*. Native.

Common poppy *Papaver rhoeas*. Seeds are favourite food of finches.

Crocus *Crocus* spp. Yellow and orange flowers are attractive to sparrows because they contain yellow pigment carotene to brighten up their plumage for the breeding season.

Field scabious *Knautia arvensis*. Native.

Globe thistle *Echinops ritro*. Seedheads are eaten by goldfinches and flower heads attract insects.

Greater knapweed *Centaurea scabiosa*. Native.

Lavender *Lavandula* spp. Flowers going to seed are attractive to goldfinches.

Meadow cranesbill *Geranium pratense*. Native.

Mistletoe *Viscum album*. Native. Familiar white globular berries of this parasite that grows in trees, especially apple, are a good food source for blackbirds. Can be propagated from shop bought mistletoe by rubbing berries and seeds into the branch unions of established trees.

Musk mallow *Malva moschata*. Native.

Ox eye daisy *Chrysanthemum leucanthemum*. Native.

Primrose *Primula* spp. Including Oxlip and Cowslip. Yellow and orange flowers are attractive to sparrows.

Rough hawkbit *Leontodon hispidus* Native

Self heal *Prunella vulgaris*. Native.

Sunflower *Helianthus* spp. Seed heads are eaten by greenfinches. The nectar attracts a wide range of insects.

Teasel *Dipsacus fullonum*. Native. Seed heads are a favourite food of goldfinches.

Wild strawberry *Fragaria vesca*. Native.

Plants to attract butterflies and moths

Spring nectar

Aubretia *Cruciferae* spp.

Bluebell *Endymion nonscriptus*. Native.

Clover *Trifolium* spp. Native.

Cuckooflower or lady's smock *Cardamine pratensis*. Native.

Daisy *Bellis perennis*. Native.

Dandelion *Taraxacum officinale*. Native.

Forget-me-not *Myosotis* spp. Native.

Honesty *Lunaria* spp.

Pansy *Viola* spp.

Primrose *Primula vulgaris*. Native.

Sweet rocket *Hesperis matronalis*.

Wallflower *Cheiranthus* spp.

Late summer / autumn nectar

Buddleia spp. Not to be planted in rural locations in Purbeck due to its invasive nature.

Evening primrose *Oenothera biennis*.

French marigold *Tagetes patula*.

Honeysuckle *Lonicera* (native) and species.

Ice plant *Sedum spectabile*.

Ivy *Hedera helix*. Native.

Jasmine *Jasminum* spp.

Knapweed *Centaurea scabiosa*. Native.

Lavender *Lavandula* spp.

Marjoram *Origanum* spp.

Michaelmas daisy *Aster divaricatus*.

Mint *Mentha* spp.

Red valerian *Centranthus ruber*.

Scabious *Knautia arvensis*. Native.

Thyme *Thymus* spp.

Plants for caterpillars (all native)

Holly *Ilex aquifolium* and ivy *Hedera helix*. Both native plants required to complete the life cycle of the holly blue butterfly.

Buckthorn *Rhamnus cathartica* and alder buckthorn *Frangula alnus*. Both of these native plants attract the brimstone butterfly.

Cuckooflower or lady's smock *Cardamine pratensis* and garlic mustard *Allaria petiolata*. Both of these native plants attract orange-tip and green-veined white butterflies.

Hop *Humulus lupulus* Native. Attracts comma butterfly and moths such as buttoned snout, angle shades and dark spectacle).

Common bird's-foot-trefoil *Lotus corniculatus*. Native. Attracts the common blue butterfly.

Stinging nettles *Urtica dioica*. Native. Attracts comma and red admiral butterflies and moths such as scarlet tiger, spectacle, small magpie and snout.

See the Butterfly Conservation Trust website for more info www.butterfly-conservation.org

Plants to attract bees

Common trees

A number of trees are useful for providing pollen and/or nectar for bees and other pollinating insects. This list includes plants suitable for a range of habitats, including gardens and open spaces in urban and rural developments. As a rule however, native species should be planted as far as is possible on rural development sites.

Possible sizes are not given as these can vary dramatically according to the situation, soil, altitude, exposure to wind, etc. All of these trees will normally flower in the UK, although some will need a good summer to flower well.

Alder *Alnus glutinosa*. Native tree. Good very early source of pollen. Flowers Jan–Mar.

Blackthorn *Prunus spinosa*. Common native hedge plant/small tree. Flowers Mar–May. Masses of white flowers. Valuable source of early pollen.

Cherry *Prunus* spp. Huge group, mainly decorative trees. Avoid double flowered varieties if wanting to attract bees. Medium sized trees. *P. avium*. Native gean, mazzard or wild cherry. Flowers Apr. *P. cerasus*. Sour cherry, small shrubby tree. Flowers profusely in May. *P. cerasifera*. Myrobalan plum. Flowers Mar–Apr. Wide range of cultivars, some with purple foliage. *P. padus*. Native Bird cherry. Usually smaller than the wild cherry. Often planted as an ornamental cherry. Long racemes of white almond scented flowers in May. *P. subhirtella autumnalis*. Attractive small tree. Winter flowering. *P. x yedoensis* Yoshino cherry. Small tree that flowers Mar–Apr.

Chestnut *Aesculus* spp. Large trees. *A. hippocastanum* horse chestnut. White flowers Apr–May. *A. carnea*. Red flowers in May. *A. indica*. Indian horse chestnut. Pink flowers in May–Jun. *A. californica*. Buckeye. White/pink flowers in Jul–Aug.

Chestnut, sweet or Spanish *Castanea sativa*. Flowers in Jul. Large tree.

Crab apple *Malus* spp & hybrids. Beautiful small sized trees. Spring flowering. Many named varieties eg. ‘John Downie’, ‘Profusion’, ‘Golden Hornet’ (see more below under trees to attract birds).

Eucalyptus spp. Evergreen, aromatic foliage. Flower late summer. *E. gunnii*, *E. niphophila*, *E. parviflora*.

Hawthorn *Crataegus* spp. Large shrubs/small trees flowering in May. Erratic, but can be

profuse producers of nectar. *C. oxycantha*, *C. monogyna*. Native. *C. prunifolia*, *C. crus-galli*. See under trees to attract birds for more varieties.

Hazel *Corylus* spp. Small tree/large shrub. Catkins valuable source of pollen Mar–Apr
Corylus avellana. Native species, often coppiced. *C. maxim*. Filbert.

Holly *Ilex* spp. Evergreen, tiny flowers, attractive to bees. Flowers May - Jun.
Ilex aquifolium. Native. *I. opaca* and spp.

Honey locust *Gleditsia tricanthos*. Long branched spines on trunk, flowers in July.

Indian bean tree *Catalpa* spp. Magnificent, spreading trees with panicles of scented, foxglove-like, speckled flowers in Jul–Aug. *Catalpa bignonioides*, *C. fargesii*, *C. ovata*.

Judas tree *Cercis siliquastrum*. Pretty small tree, purple pea-flowers on bare stems in Apr–May.

June berry, snowy mespilus *Amelanchier lamarckii*. Beautiful tree, masses of white flowers in spring.

Lime *Tilia* spp. Large tree. Large quantities of nectar. *T. cordata*. Small leaved lime. Late Jul flowering. *T. x euchlora*. Crimea lime. No honeydew. Flowers Jul–Aug. *T. x europaea*. Common lime. Native. Flowers Jun–Jul. *T. maximowicziana*. Japanese lime. Flowers Jun. *T. x orbicularis*. Hybrid lime. Flowers Jul–Aug. *T. petiolaris*. Weeping silver lime. Flowers Jul–Aug. *T. platyphyllos*. Broad leaved lime. Flowers Jun–Jul. *T. tomentosa*. Silver lime. Flowers Jul.

Maples *Acer* spp. The decorative Japanese maples rarely flower in the UK, but the larger species are all excellent bee plants. Spring flowering. *A. campestre*. Field maple, native tree. *A. macrophyllum*. Oregon maple. *A. negundo*. Box elder. *A. opalus*. Italian maple. *A. platanoides*. Norway maple.

Mountain ash or rowan *Sorbus aucuparia*. Spring flowering native tree. Many other cultivated species, some detailed below under trees to attract birds.

Sweet gum *Liquidambar styraciflua* and hybrids. Spring flowering.

Sycamore *Acer pseudoplatanus*. Valuable nectar source. Flowers May.

Tree of heaven *Ailanthus altissima*. Large town tree. Flowers Jul–Aug.

Tulip tree *Liriodendron tulipifera*. Large tulip-like flowers in Jun–Jul.

Whitebeam *Sorbus* spp. Small to medium sized trees. Many cultivated species. *S. aria*. Common whitebeam. Flowers May–Jun. *S. intermedia*. Swedish whitebeam. Flowers Jun. More species detailed below under trees to attract birds.

Fruit trees

All are good sources of pollen and many are also excellent nectar producers.

Almond *Prunus dulcis*. Earliest to flower. Profuse nectar producer.

Apple *Malus pumila*. Can be grown as cordons and ‘bush’ forms suitable for small gardens. Range of varieties, flowering from early April to late May. Good nectar producers.

Cherry *Prunus cerasus*. Large trees, good nectar producers.

Medlar *Mespilus germanica*. Large white flowers in May.

Pear *Prunus communis*. Flowers Mar–Apr. Weak nectar, rarely collected.

Plum *Prunus domestica*. Flowers early Apr. Good nectar source.

Quince *Cydonia oblonga*. Flowers in spring. Good nectar source.

Less common trees

These are less widely grown but are not difficult and are good bee trees. Some flower when there is little other nectar available.

Snowdrop tree *Halesia carolina*. Pretty, small tree. Bunches of flowers along branches in May.

Golden rain tree *Koelreuteria paniculata*. Small to medium sized tree. Large, loose panicles yellow flowers in Jul–Aug.

Pagoda tree *Sophora japonica*. Medium to large tree for south facing locations. Creamy flowers Sep. *S. tetraptera*. Smaller, needs shelter. Deep yellow bunches of flowers in spring.

Chinese bee tree *Tetradium (Euodia) danielli, (hupehensis)*. Medium tree with strongly scented small white flowers Aug–Oct.

Shrubs

A number of shrubs are useful for providing pollen and/or nectar for bees and other pollinating insects. This list includes plants suitable for a range of habitats, including gardens and open spaces in urban and rural developments. Native species should be planted as far as is possible on rural development sites.

Abutilon *vitifolium*. Climber. Flowers May–Jul. Soft grey/green vine shaped downy leaves, large saucer-shaped flowers, various colours.

Barberry *Berberis* spp. Flowers Apr–Jul. Wide range of species, all attractive to bees.

Brooms *Cytisus* spp. Wide range of species and hybrids, mostly early flowering.

Butterfly bush *Buddleia*. *B. alternifolia*. Long lilac spikes of flowers in June. *B. globosa* Globular orange flowers in May. *B. x weyeriana*. Orange panicles of flowers in Jun–Oct.

Calico bush *Kalmia* spp. Flowers June. Evergreen, acid soils. *K. angustifolia*, *K. latifolia*.

Californian lilac *Ceanothus* spp. Wide range of species, all attractive to bees. Range from spring to late summer flowering.

Californian poppy *Eschscholzia* spp. Late summer–autumn flowering.

Cherry laurel *Prunus laurocerasus*. Flowers April. Evergreen. Very attractive to bees in summer.

Clematis spp. Climbers. Most large flowered hybrids only produce pollen. *C. armandii*. Evergreen, strongly scented. Flowers Apr–May. *C. cirrhosa*. Evergreen, small bell-like flowers in Dec–Feb. *C. montana*. Flowers Apr–May. *C. vitalba* ‘Traveller’s Joy’. Native. Flowers Jun–Jul.

Clethra *alnifolia*. Acid soils. Flowers Aug–Oct.

Cotoneaster spp. Flowers June. Wide range of good garden plants.

Currant *Ribes* spp. *R. sanguineum*. Flowering currant. Flowers Apr. Pink, red or white

flowers. *R. odoratum*. Buffalo currant, yellow flowers in Apr. *R. speciosum*. Red flowers in Apr–May.

Daisy bush *Olearia* spp. *O. haastii*. White flowers Jul–Aug. *O. macrodonta* Flowers Jun.

Deutzia spp. Summer flowering.

Escallonia spp. and hybrids. Wide range of good garden plants. Evergreen.

Eucryphia spp. Evergreen. Large, beautiful, single white flowers in Aug–Sep. *E. glutinosa*, *E. nyamansensis*

Firethorn *Pyracantha* spp. Flowers May–Jun. *P. angustifolia*, *P. coccinea*.

Fuchsia magellanica. Late summer flowering.

Genista spp. Early flowering.

Gorse or furze *Ulex* spp. Long flowering periods. *U. europaeus*. Native, *U. minor*. Native.

Honeysuckles *Lonicera* spp. Shrubby honeysuckles have smaller more open flowers, with more available nectar than the climbing varieties. Some flower late winter. *L. angustifolia*, *L. standishii*, *L. purpusii*.

Hydrangea spp. *H. petiolaris*. Climber. Flowers Jun. *H. paniculata* and *H. villosa*. Flower late summer.

Ivy *Hedera helix*. Native. Climber, evergreen. Good source of late nectar.

Japonica or ornamental quince *Chaenomeles* spp. Flower Feb–Apr.

Kolkwitzia amabilis. Flowers May–Jun.

Lilacs *Syringa* spp. and hybrids. Spring flowering. Wide range of medium and large shrubs, all strongly scented.

Mexican orange blossom *Choisya ternata*. Flowers Apr–Jun. Evergreen.

Mock orange *Philadelphus* spp. Flowers Jun–Jul. Large number of species and varieties, most strongly scented.

Myrtle *Myrtus communis*. Late summer flowering. Evergreen, fragrant flowers.

Oregon grape *Mahonia* spp. Winter/spring flowering. Evergreen shrubs with yellow flowers. Valuable pollen source early in the year. *M. aquifolium*, *M. bealei*, *M. japonica*, *M. lomariifolia*.

Portugal laurel *Prunus lusitanica*. June Flowering. Evergreen.

Potentilla fruticosa. Many varieties and hybrids. Small shrubs, white or yellow flowers. Long flowering period.

Rhododendron spp. Small varieties of rhododendron & azaleas can be worked by honey bees. *R. ponticum* should not be planted in Purbeck as it is an invasive species.

Rock roses *Cistus* spp. Evergreen. Range of colours. Flower May–Jul.

Rose *Rosa* spp. Only single flowered types. Wild roses - *R canina* dog rose, *R pimpinellifolia* burnet rose, *R rubiginosa* sweet briar, *R. rugosa* Japanese rose.

Rosemary *Rosmarinus officinalis*. Flowers Apr–May. Evergreen, aromatic.

Russian sage *Perovskia atriplicifolia*. Flowers Aug–Sep. Aromatic grey foliage & purple/blue flowers. Excellent bee plant.

Shrubby veronica *Hebe* spp. Wide range of sizes from dwarf to large, evergreen, flowering periods vary from early summer to late. Some very tender species.

Snowberries *Symphoricarpos* spp. Flower Jun–Aug. Most produce large amounts of nectar *S. alba*, *S. occidentalis*, *S. orbiculatus*, *S. rivularis*.

Sun roses *Helianthemum* spp. and hybrids. Evergreen dwarf shrubs, many colours.

Tamarisk *Tamarix* spp. Flowers May–late summer. Feathery foliage, masses of tiny pink flowers.

Viburnum spp. Wide range of evergreen and deciduous shrubs. Good species include *V. bodnatense*, *V. fragrans*. Deciduous, winter flowering, scented. *V. burkwoodii*. Evergreen, scented. Flowers Apr. *V. carlesii*. Scented. Flowers Apr. *V. juddii*. Scented. Flowers Apr–May. *V. opulus*. Native guelder rose. Flowers Jun–Jul. *V. tinus*, *V. laurustinus*. Evergreen. Flower Oct–Mar.

Virginia creeper *Parthenocissus quinquefolia*. Flowers Aug.

Weigela florida and hybrids. Flower May–Jun. Pink, red or white flowers.

Willows *Salix* spp. There are numerous small shrubby willows. Flower early spring. Good species include *S. apoda*, *S. boydii*, *S. hastata*, *S. lanata*, *S. melanostachys*, *S. uva-ursi*

Wisteria spp. Climbers. Flower Apr–May. *W. floribunda* & *W. sinensis*