Wildlife Friendly Planting Suggestions for the ORC/Park Hospital site Environmental Landscaping

Dr Judith A Webb (Friends of Lye Valley Group) August 2012, updated 06.04.2014

I am also part of the Pollinator Advisory working group producing a **Pollinator Action Plan for Oxford** with Oxford City Council.

General comment

Please don't grow anything which needs PEAT BASED COMPOST i.e. heathers, rhododendrons, camellias. Non-peat requiring plants should be the norm. If border soil improvement required, recycled materials or composted green waste should be used as soil improver.

Pollinators of all sorts are in steep decline nationally so go for types with flowers that primarily provide pollen and nectar for bees, beetles, butterflies, moths, flies etc.

Berry bearing sorts which will feed birds should also be priority.

A. Trees

General - Less useful are wind-pollinated or coniferous, but some conifers good for birds which feed on seeds and need the cover. I note there are a lot of conifers on site already so **plant no more of these**. If any conifers have to be removed, replace with deciduous trees, producing nectar. Avoid non-natives like: plane, foxglove tree, robinia and Gleditzia as their leaves and flowers provide little or no food for native insects. DO plant the following trees which are good for wildlife.

GOOD WILDLIFE TREES:

Holly -(any variety e.g. variegated or plain) but chose hermaphrodite, so there are berries and pollen bearing flowers on same tree. Flowers provide nectar and pollen and are eaten by caterpillars of Holly Blue butterfly.

Lime - Any limes, but most preferred are native **Small- leaved lime** (*Tilia cordata*) and **Large-leaved lime** (*Tilia platyphyllos*) NOT the hybrid *T. vulgaris*. The native species were undoubtedly the native forest trees of this limestone area before the forests were cleared by the first Neolithic farmers 5000 odd years ago. These start flowering in June and extend to July and are the best trees for bees. **Caucasian/Crimean Lime** *Tilia euchlora* is a useful late flowerer in July which extends the usefulness to bees in summer. Silver-leaved lime *Tilia petiolaris* should not be planted because it produces nectar which under some climatic conditions narcotises and kills bees. Some sources say Limes resistant to Phytophthora tree diseases. Leaves used as food by many insects e.g. caterpillar of lime hawkmoth.

Rowans – prefer native *Sorbus aucuparia* and not ornamental varieties (especially NOT white berried rowans which are useless as bird food) Provides flowers for bees and attractive red berries for birds.

Whitebeam – *Sorbus aria*. Please use proper native whitebeam and NOT Swedish hybrid whitebeams

Wild Service tree, *Sorbus torminalis* - rare native small tree with flowers, and fruits good for wildlife and leaves with attractive autumn colour. Already planted locally by Ox. City Council in an excellent initiative.

Cherries – any but MUST be single flowered, NOT doubles or semi doubles. Double flowers produce little or no pollen and nectar (see article).

Apples/Malus sp – any, ornamental good as long as not double flowered.

Pears/Pyrus species. As for apples.

Native Hawthorns Crataegus monogyna or C. laevigata are excellent. Please don't plant double hawthorns like Paul's Scarlet or exotic hawthorns like Cockspur thorns

Field Maple, *Acer campestre* – native species with spring flowers useful to bees and winged seeds. Norway maple *Acer platanoides* is the best nectar source for early spring bees, but no Sycamore please – not native and spread by seed aggressively off-site to natural areas (Lye Valley nearby?)where they can be problems.

Oaks – please only native oaks, *Quercus robor,* if oaks are to be used. Not turkey oaks or other foreign oaks like red oaks.

Birches of all sorts are good for many types of wildlife, attractive barked ones as well as *Betula pendula*.

Beech and Hornbeam – both good native trees with seeds valuable to wildlife and leaves valuable to wild insects but note that **both are wind-pollinated therefore have no nectar to feed bees**. Quite a lot of these planted locally in the Boundary brook corridor, so don't plant any more - plant limes in preference to any of these.

Horse chestnut (Aesculus sp) – ONLY *Aesculus indica* and some varieties of *Aesculus carnea* seem resistant to the horse chestnut micromoth, so plant these and NOT *A. hippocastanum*

Conifers - Scot's Pine, *Pinus sylvestris*. Prefer this native conifer, if evergreen trees are really needed.

TREES TO AVOID planting!:

Ash (*Fraxinus excelsior* or *F. ornus*) - useless to wildlife. The first species produces abundant seed which spread aggressively to nearby wild areas and cause problems because of need for removal. Ash dieback will eventually arrive and kill them anyway.

Alders (*Alnus* sp) – Any species not a good idea b**ecause of the *Phytophthora* diseases rampaging through alders currently in the Lye Valley, early death likely, waste of money.

Horse Chestnut, *Aesculus hippocastanum* because of the *Phytophthora* disease and the micromoth problems, early death likely, waste of money.

Yew *Taxus baccata*, unless as clipped hedge. Berries from yews are spread by birds into local native areas in the Lye Valley where they cause too much shade and take lots of volunteer effort to remove.

Too many dark conifers esp. Lawson's Cypress (*Chamaecyparis)* and similar e.g. *Thuja*, *Cedrus*, *Larix*, *Tsuga, Abies, Picea* - none of these are British natives and all will be bad news for bees, butterflies etc. as wind pollinated and leaves not used by many insects and in some cases produce deep shade and acid leaf litter that does not decompose and feed earthworms etc.

B. Shrubs and ground cover creepers

There are many shrubs with flowers useful to bees. Good ones are Lavender, Sages (Salvias) Rosemary. Basically anything with large, open daisy type flowers like Olearia x haasti or Brachyglottis will be good. Shrubby Potentillas can be useful too. Viburnums can have very useful flowers if they are summer flowering (not winter, see below) and some have berries good for birds. Some Berberis and mahonia can be useful, depending on flowering time. Single flowered roses of all sorts are good, but no double or semi-doubles. Cotoneaster and Pyracantha can be good with flowering red or yellow currents excellent for feeding spring bees. **Definitely don't plant Buddleja**, even though it is thought to be good for butterflies (it is not that good). It seeds aggressively into the local wild areas and much volunteer time is spent locally removing it from the SSSI. Mahonia and all sorts of Berberis are very good for early insects, but for mid-summer, how about lots of Shrubby Hare's Ear? (*Bupleurum fruticosum* – see discussion in article). Low cotoneasters like C. horizontalis are good nectar producers for bees.

There are many Shrubs to avoid as they are useless as food to wildlife (although may provide cover and possibly nesting opportunities) - see the comments in the attached article '**Flowers for Flies'. D**on't use lots of winter-flowering shrubs like *Elaeagnus* or *Viburnum tinus* because they flower at times useless for native insects.. Thus winter-flowering heathers are also useless and summer-flowering heathers should not be planted because of the requirement for peat -based acid compost (soil here is not acid enough and peat should never be used these days). No Spotted laurel, snowberry or coralberry. No dogwoods that are cut down every year to have attractive winter red or yellow stems. Why? dogwood has excellent flowers for insects, but shrubs managed in this fashion never ever flower, so are useless.

C. Ground cover

Good things, for example are purple bugle (*Ajuga***)**, lamb's ear (*Stachys byzantina*) - both are brilliant for bees and far preferable to evergreens of all sorts, but they must be in full sun. No ground cover ivy, only flowering ivy is valuable so plant ivy that can be allowed to climb up something like a fence or wall and flower (see article) ivy flowers are critically important in autumn to some butterflies, bees and flies. Avoid ground cover periwinkle, pachysandra, conifers, Do plant honeysuckles if possible but not Lonicera nitida (shrubby honeysuckle) – this is not good for wildlife and is a problem plant in the Lye Valley nearby where much volunteer effort is spent removing shrubs of it arrived by seed. Hellebores and Pulmonarias are good for spring bees. Grassy areas could have crocuses, muscari, scillas, bluebells, daffodils, tulips, primroses and cowslips with great benefit to early bees. Primroses anemones and bluebells are suitable for grass areas in semi shade under trees. No ferns, palms, grasses, bamboo, or that black strap plant Ophiopogon (no nectar in any). All varieties of thymes and marjoram can be used for ground cover and are brilliant for bees but must be in full sun and unshaded.

Finally, See the **RHS** information 'Perfect for Pollinators Plant List' * and choose from that (note this includes plants for moths, butterflies and flies as well as bees).

See my summary sheet on simple rules for planting for bees *

Links added after submission of document