Creating habitat for pollinators in Britain & Ireland
Statement agreed by Plant Link UK and Invertebrate Link, 2011

Flowering plants provide essential resources of pollen and nectar for pollinating insects such as wild bees, honeybees, hoverflies, butterflies, moths and some beetles (Buglife, 2011). This guidance has been produced to ensure that planting projects are carried out using good practice that will produce maximum benefit for biodiversity. Planting should not be used as a replacement for maintaining existing flower-rich habitats or for restoring species diversity through changes in management (Plantlife, 2011a; Plant Link, 2012). **These guidelines are therefore applicable only to situations where natural regeneration of wild flora is unlikely to be successful.**

Principal considerations

- Potential sites for creating habitats rich in nectar and pollen should first be assessed, to identify their suitability for planting (see Flora locale, 2008) and their current importance for plants and other wildlife.
- Seed or plants should not be introduced into sites that already have a rich flora or other important habitat, or which are degraded but could be restored through appropriate management.
- Planting should be undertaken only where ongoing management has been planned and can be carried out.
- The choice of plant species (native or non-native)[1] and varieties (wild or selectively bred) needs to be considered carefully, within the context of the site's characteristics (e.g. soil and current land use), location and ecological sensitivity, as well as other biodiversity priorities identified for the area.
- Non-native species and selectively bred varieties should not be introduced into the wild – their use should be restricted to cultivated land, gardens and areas designated for ornamental planting in towns.
- Known and potentially invasive non-native species should never be planted (Plantlife, 2011b).
- Choose species that fulfill the requirements of pollinators and provide appropriate flowering continuity (see Edwards & Jenner, 2005; Macdonald & Nisbet, 2006; Hymettus, 2010)
- Details of species used for creating new permanent habitats should be fully documented and passed to the local environmental records centre or local government agency office.

Options for sowing and planting native species

Guidelines on sourcing stock for sowing and planting native species are summarised in the table below (based on Flora locale, 2008). Further details are given in the following sections.

Site location	Suitable origin for native plants and seeds			
	Natural regeneration	**Similar habitat nearby**	**Climatically similar UK region**	**Britain or Ireland** [i]
Special sites (e.g. SSSIs) [ii]	Best practice	Best practice	May be suitable	Not advised
Ecologically sensitive areas [i] [ii]	Best practice	Best practice	Acceptable	Not advised
Farmed landscape	Where feasible	Best practice	Acceptable	Not advised [iv]
Urban, suburban, industrial	Not advised	Acceptable	Acceptable	Acceptable
Formal parks and gardens	Not advised	Acceptable	Acceptable	Acceptable

[i] Stock of mixed or non-specific origin within Britain or Ireland
[ii] For SSSIs and other protected sites, the introduction or removal of vegetation requires consent from the relevant authority
[iii] e.g. near special wildlife sites, in BAP priority habitats, in biodiversity hotspots, in the coastal fringe
[iv] It is normal practice however to utilise some EU certified varieties of native grass species which make mixtures affordable

In the countryside

- It is a priority to maintain and restore any existing flower-rich habitats, such as unimproved grassland, flower-rich road verges, hedge banks and field margins.
- For farmers with registered agricultural land, financial support (via agri-environment schemes) is available to manage, restore and create permanent or short-term flower-rich habitats for pollinators[2] (see Bumblebee Conservation Trust, 2011 and UK Agriculture, 2010).
- For degraded sites where restoration through appropriate management is not possible, permanent species-rich grassland can be created using seed of native wild flowers (usually in a matrix of appropriate grasses where sown on bare land)[3] including, where available, directly-harvested seed or seed-rich green hay from existing grasslands (Flora locale 2005a & b).

[1] 'Native' is defined as species and varieties that were part of the UK's wild flora before AD 1500.
[2] Species-rich grassland provides the greatest benefit for pollinators, followed by long-term native wildflower field margins. Conservation headlands and short-term pollen and nectar mixes also contribute.
[3] Standard pollen-nectar seed mixtures that consist mainly of Distinct Uniform and Stable EU registered legumes and other non-native species should not be used for this purpose.

- Opportunities should be taken to reintroduce characteristic native wild flowers into flower-poor semi-improved grass fields (Flora locale, 2005a and Bumblebee Conservation Trust, 2011).
- Rural brownfield sites can be enhanced by sowing native wildflower mixes appropriate to the local area, using a low sowing rate to leave some bare ground for invertebrates
- Trees and shrubs provide a vital food source for pollinators. Except for orchards and commercial plantations, only native species should be planted, using UK-native origin stock of regional provenance.
- Options for cultivated land include allowing natural regeneration on annually cultivated field margins or conservation headlands; establishment of perennial flower-rich field margins; or planting short-term pollen and nectar mixes (Hymettus 2010). Other biodiversity priorities (e.g. the presence of a seedbank of annual flowers of cultivated land) should always be taken into consideration.
- When creating permanent wildflower grasslands and other long-term wildflower habitats (such as when introducing woodland wild flowers to recent plantations) always use wild flower species that are widespread and appropriate to the locality and that have been grown or collected from UK native-origin stock (see table overleaf). See Flora locale & Plantlife (2000) and Flora locale (2008)

Managed greenspace

Identify both the potential to restore native wild flowers through changing current management and, where no flowers remain, identify where wild flowers can be introduced.

Gardens and urban sites

For gardens and strictly urban situations such as flower beds in parks, brownfield sites and road verges, choose from the extensive palette of both native wild flowers, trees and shrubs, and non-native but non-invasive species that are available commercially (see British Beekeepers' Association, 2007 and Bumblebee Conservation Trust, 2011).

Living biodiverse roofs

When designing living roofs for pollinators, use appropriate native wild flower species wherever possible, especially where the roof is in a rural, ecologically sensitive setting.

Purchasing native wild flower plants or seed

- Always specify British (or Irish in Ireland) native-origin planting stock; a more precise locality of origin (e.g. Wales, Scotland, Northern Ireland, south-east England) may be preferred or specified for projects in ecologically sensitive areas.
- Buy from specialist suppliers who have the appropriate technical knowledge, in preference to general seed merchants or agricultural suppliers.
- For projects in ecologically sensitive areas, consider contract seed harvesting and propagating locally collected seed, in order to introduce scarcer species (e.g. Horseshoe vetch for a chalk grassland project).
- Follow existing published advice (e.g. Flora locale, 2005b).

Further information

Guidance on sourcing and using wild flora on www.floralocale.org

Flora locale & Plantlife (2000) *Code of Practice for collectors, growers and suppliers of native flora*
Flora locale *(*2005a*) Enhancing the floral diversity of semi-improved grassland*
Flora locale (2005b) *Buying native flora*
Flora locale (2006) *Planting near watercourses*
Flora locale (2008) *Go Native! Planting for biodiversity*
Flora locale (2010) *Wild meadows and bumblebees*

Other references

British Beekeepers' Association (2007) *Trees useful for bees.* Available at http://tinyurl.com/5rq3ymq
Buglife (2011) *Pollinators.* Available at www.buglife.org.uk/discoverbugs/knowledge/Pollination
Bumblebee Conservation Trust (2011) *Meadow restoration. Factsheet 3 Land Management Series*. Available at www.bumblebeeconservation.org.uk
Edwards, M. & Jenner, M. (2005) *Field guide to bumblebees of Great Britain and Ireland.* Ocelli.
Hedgelink (2010) *All about hedges.* Available at http://hedgelink.org.British/
Hymettus (Conservation of bees, wasps and ants) (2010) *Farm buzz.* Available at http://tinyurl.com/3q4ufj4
Plantlife (2011a) *Keeping the wild in wild flower*
Plantlife (2011b) *Invasive plants*. Available at www.plantlife.org.uk/campaigns/invasive_plants/
Plant Link (2012) *Increasing native plant diversity in Britain & Ireland through natural regeneration*
Macdonald, M. & Nisbet, G.(2006) *Highland bumblebees. Distribution, ecology and conservation.* Highland Biological Recording Group, Inverness.
UK Agriculture (2010) *Conservation headlands.* Available at www.UKagriculture.com/conservation/conservation_headlands.cfm

This statement is endorsed by:


(Amateur Entomologists' Society, Ancient Tree Forum, British Arachnological Society, British Entomological & Natural History Society, Buglife, Bumblebee Conservation Trust, Butterfly Conservation, Countryside Council for Wales, Dipterists Forum, Field Studies Council, Flora locale, Freshwater Biological Association, Natural England, National Trust, Northern Ireland Environment Agency, People's Trust for Endangered Species, Plantlife, Royal Entomological Society, Royal Society for the Protection of Birds)