

Supplementary Guidelines for Pollinator Friendly Planting

By planting bee friendly flowers in amenity areas we can take positive action for wildlife that will help to support plant pollination: a vital Ecosystem Service.

The following guidelines are intended to supplement normal planting and management practice in urban planting areas. Three types of amenity planting are considered:

- Bedding planting
- Shrub and tree planting
- Flower rich long grass

For larger or non-urban areas specific habitat restoration or creation guidance should be considered (some examples are listed in the Other Useful Guidance section below).

Why plant for Bees

In addition to their intrinsic value, bees and other pollinating insects have an important economic value. The crop pollination service they provide contributes £440m per year to the UK economy and that is in addition to the value of the honey that our honey bees make!

Unfortunately bee populations have declined significantly in the last 20 years and this is affecting pollination. This bee decline has been caused by a shortage of suitable food plants, a reduction in bee keeping and the effects of modern agrochemicals.

But we know that this decline can be offset with bee friendly planting and through small changes in management. So follow the simple guidelines below and make a difference for wildlife and help support bee pollination.

Happy planting!

Guidelines for Bedding planting

The following guidance should be considered when planting up areas with annual bedding plants.

Planting Guidelines

- When you select the bedding plants choose as many as is appropriate from the **pollinator friendly planting list**.
- Be sure that the species chosen are appropriate to the existing soil type.
- Don't select highly bred cultivars of the pollinator friendly species as selective breeding may have made these varieties of little or no use to local Welsh bees.
- Ensure that no species are included from the **potentially problematic species list**
- If possible select plant species with a variety of different flowering characteristics and flowering dates; try to ensure that the flowering time spans throughout the spring and summer (March-Sept).

Maintenance Guidelines

- Avoid the use of pesticides, except to control invasive plants or pest problems where alternative techniques are ineffective. Where weed control is necessary use spot-treatment applications.
- Don't use systemic insecticide (including neonicotinides)

Guidelines for Shrub and tree Planting

The following guidance should be considered when planting with perennial shrubs and tree species.

Guidelines for New Planting

- Trees are often planted into existing habitats for example unmanaged grassland areas. If this is the case it is worth consulting to ensure that the site does not have any existing wildlife interest. Talk to CCW or your County Council Ecologist.
- Include as many shrub species as is appropriate from the **pollinator friendly planting list**.
- If possible select plant species with a variety of different flowering characteristics and flowering dates; try to ensure that the flowering time spans throughout the spring and summer (March-Sept).
- Be sure that the species chosen are appropriate to the sites existing soil type.
- Ensure that no species are included from the **potentially problematic species list**

Maintenance Guidelines

- Avoid the use of pesticides, except to control invasive plants or pest problems where alternative techniques are ineffective. Where weed control is necessary use spot-treatment applications.
- Don't use systemic insecticide (including neonicotinides)
- Where possible manage the planting to give a range of shrub age and height.

Flower Rich Long Grass

The following guidance should be considered when creating areas of flower rich long grass.

Guidelines for the Creation of Flower Rich Grassland Areas

- Before works begin it is worth considering whether the site has any existing wildlife value. If you think it may consult CCW or your County Council Ecologist.
- Consider whether you have access to the necessary machinery to manage long grass and make sure that these machines can physically access the site.
- Don't import rich topsoil or apply soil conditioners or fertilisers. Wildflowers thrive best on nutrient poor soils. Consider rotivating rich soils to bring the nutrient poor subsoil to the surface.
- When establishing wildflower meadows, use a mixture of native grasses and wild flowers of local provenance. Cuttings or hay from a local flower-rich meadow are the best source.
- Include as many species as is appropriate from the **pollinator friendly planting list**.
- Be sure that the species chosen are appropriate to the existing soil type.
- If possible select plant species with a variety of different flowering characteristics and flowering dates; try to ensure that the flowering time spans throughout the spring and summer (March-Sept).
- Ensure that no species are included from the **potentially problematic species list**
- Don't use non native cultivars of the approved species as these species may be of little or no use to local Welsh bees.
- Select grass species that require minimal maintenance or irrigation such as native bents and fescues (see table2).
- Sow 80% grass seed and 20% flowering plants, and sow at a low sowing rate somewhere between 2 and 6 grams per m²

Maintenance

- Avoid the use of pesticides, except to control invasive plants or pest problems where alternative techniques are ineffective. Where weed control is necessary use spot-treatment applications.
- Don't use systemic insecticide (including neonicotinides)
- Cut areas once or twice a year in early spring (before April) or in the autumn (after August). This is important as it allows the plants to flower and set seed for next year.

- If possible leave some part of the site uncut each year (e.g. field margins, scrub and woodland edges). This is important to ensure there are sources of pollen and nectar through into the autumn and to ensure that late flowering plants have a chance to flowers and set seed.
- Remove the cut grass to reduce the soil fertility, but if possible leave for a few days after mowing to allow wildflower seed to fall and invertebrates to escape.
- Maintain a wide grassy margin of at least 1-2m, next to hedges, fences and ditches.

Other Useful Guidelines

Lowland Grassland Management Handbook: <http://naturalengland.etraderstores.com/NaturalEnglandShop/product.aspx?ProductID=d7615a57-c014-40da-b5f8-a1c328aada56>

Woodland Trust: <http://www.woodlandtrust.org.uk/en/plant-trees/help-advice/planting-trees/Pages/download.aspx>

Golf Detailed Guidelines 9: Landscape management: <http://www.english-heritage.org.uk/publications/golf-detailed-guideline-9-landscape-management/>

Pollinator Friendly Planting Policy

In Brief

By ensuring that all amenity planting* associated with the WAG estate is pollinator friendly, WAG Departments can deliver legislative duties, take positive action for wildlife and can help to support pollination: a vital Ecosystem Service that is essential to a wide range of businesses including agriculture, tourism and even in the production of bio-fuels.

Background

The Welsh Assembly Government is committed to enhancing biodiversity in amenity spaces¹.

The Environment Strategy calls for a halt in the loss of biodiversity and for the creation of an environment more friendly to biodiversity². Under Tan 5 built development is asked to provide a net benefit for biodiversity conservation³ and under the NERC Act 2006 the Assembly has a duty to further the conservation of habitats and species of principal importance for biodiversity¹.

Three of these species are bees:

<i>Bombus humilis</i>	Brown-banded carder-bee	Cardwenynen lwydfrown
<i>Bombus muscorum</i>	Moss carder-bee	Cardwenynen y mwsogl
<i>Bombus ruderarius</i>	Red-shanked carder-bee	Cardwenynen goesgoch

In addition to their intrinsic value, these and other bee species have an important economic value. An obvious example is the honey bee; in Britain we consume around 22,000 tonnes of honey annually with a retail value of around £100m. However the pollination service provided by honey bees and other pollinating insects contribute an additional £440m per year to the UK economy⁴. Many arable and horticultural crops depend on this service for pollination including oilseed rape and beans. It is also worth noting that a healthy bee population is important in the provision of affordable five-a-day fruit and vegetables.

Unfortunately bee populations have declined significantly in the last 20 years⁵ and this is already affecting pollination services. Apple and raspberry growers now need to put extra bee colonies in their fields to achieve the best crop yields⁴. This bee decline has been caused by a shortage of suitable food plants⁶, a reduction in bee keeping⁷ and the effects of modern agrochemicals⁸. The decline can however be offset by large scale restoration of pollinator habitat, for example by sowing wildflower meadows⁹.

Because such planting also assist up to 29% of the species listed in the Natural Environment and Rural Communities Bill (NERC), such planting also contributes directly to our NERC Biodiversity Duty.

Delivery

The Natural Environment Framework is currently being developed in Wales to improve the way in which we manage the health and resilience of our ecosystems and to protect our ecosystem services¹⁰. Planting that supports bees and other pollinating insects will help us to retain the key ecosystem service of pollination on which we depend for our survival.

The WAG estate stands at 100,000m² with many sites having associated amenity planting. Currently this planting supports a limited range of species that provide little benefit for biodiversity and ecosystems (and may even be planted with potentially problematic plant species).

* Amenity planting is defined within this policy as planting that includes trees, shrubs, perennial planting in herbaceous borders and seasonal bedding.

By following the key principles below the planting and maintenance of this WAG owned, managed or influenced amenity land will provide the necessary aesthetic and physical utility whilst also delivering significant biodiversity benefits^{11, 12} at little or no extra cost (for installation or on going management).

Key Principles of Pollinator friendly planting

- The Majority of plants to be selected from the appropriate **approved planting list**
- No species included from the **potentially problematic species list**
- No usage of systemic insecticide (including neonicotinides)
- Ensure that the flowering time of the plants selected for the scheme span throughout the spring and summer (March-Sept).
- Avoid highly bred cultivars of the approved species as selective breeding may have made these varieties of little or no use to local Welsh bees
- Management and aftercare to be undertaken in accordance with the **Management guidance**

For copies of the approved planting list, the potentially problematic species list or the management guidance or for any further support or assistance please contact:

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References

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2. Environment Strategy: <http://wales.gov.uk/topics/environmentcountryside/epq/envstratforwales/>
3. Technical Advice Note 5: <http://wales.gov.uk/topics/planning/policy/tans/tan5/>
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