



Wild flowers and the garden

SUMMARY Native wild

flowers can be included in many planting schemes as a way of promoting biodiversity and linking gardens to the wider countryside. Plants must not be removed from the wild but should be obtained as seeds, bulbs or growing plants from reputable suppliers. The Royal Horticultural Society offers advice on establishing



Photo: Geoff Dann

and managing wild flowers in gardens. It is important that authentic native stock of wild flowers is used, especially where large scale plantings are being undertaken.

RHS policy statements

- 1 The Royal Horticultural Society welcomes the increasing interest in the use of native wild flowers in gardens and the business that has developed to supply this market.
- 2 The RHS deplores the removal of plants from the countryside for use in gardens. Such collection is illegal without first obtaining the landowner's permission and even then should only be done in exceptional circumstances. Even the collection of seed is prohibited in the case of some rare or local species.
- 3 The RHS recommends that rather than the continual collection of seed from wild-grown plants, a limited amount of seed should be harvested by suppliers to be bulked up in cultivation for sale.
- 4 The RHS recommends that gardeners should obtain wild flower seeds or plants derived from British stock whenever possible and encourages suppliers to indicate the provenance of their original seed collections.
- 5 The RHS encourages gardeners to bear in mind conservation issues when selecting a source of wild flowers, whether as seed or plants.
- 6 The RHS supports the Botanical Society of the British Isles and other conservation organisations in condemning the random scattering of seed or dumping of unwanted garden plants in the countryside.

Wild flowers and the garden

Aims and issues

Although the deliberate use of native plants in gardens is not new, wild flower gardening has become increasingly popular. The aims of gardeners vary greatly in the degree of completeness and authenticity sought. For some it is a plant community copied from nature, composed as completely as possible of native plants; for others more the creation of a certain effect, without being purist as to whether the plants are native or not. A considerable business in the supply of plants and seeds has grown up to meet this expanding market.

The choice of plants for the majority of gardens has little impact on the native flora, and only in the largest country gardens and estates, which typically contain large semi-wild areas, is it at all significant. A

common characteristic of such gardens is that the distinction or boundary between the cultivated and the wild is blurred, and an important aim is to maintain that condition. However, the invasive success of some garden introductions, for example *Rhododendron ponticum* and *Heracleum mantegazzianum* (giant hogweed) illustrates the damaging consequences to native fauna and flora of the release of exotic species into the wild. Further information is given in the Conservation and Environment Guideline on “Invasive non-native species”.

The removal of plants from the countryside for the purpose of wild flower gardening, even when this can be done legally, is strongly discouraged. Reliance on seed is preferable, but it must be borne in mind that the repeated collection of

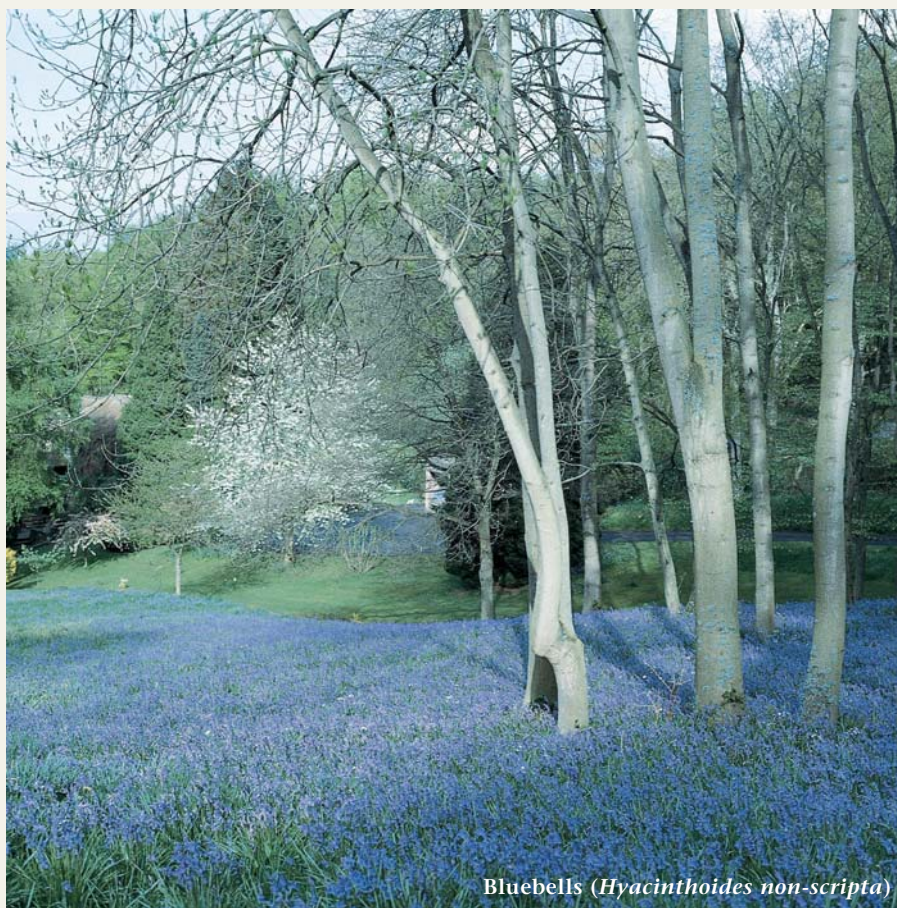
seed in quantity from wild plant communities is likely to have a destructive effect over time: the population of favoured species will suffer, and the species balance will be upset. This is a particular danger for rare or local plants whose seed it may also be illegal to collect. The best practice is for licensed suppliers to gather a nucleus of wild seed and then bulk it up through cultivation on their own land.

Wild species often contain a wide genetic diversity that is typically related to the species' geographical spread. Britain lies at the western end of the main European/Asiatic floristic region. Many British native species have a wide distribution elsewhere; some rare plants in Britain being common and even abundant in the Continent as a whole. Seed of such species is therefore likely to be much more readily available elsewhere in Europe and seed offered for sale as native species may not be of British origin at all. Populations of British native species have for the most part evolved in relative isolation and may show significant genetic differences from populations elsewhere, being on the whole better adapted to British conditions. Gardeners are advised to buy wild flower seed originating in Britain and ideally of local provenance wherever possible. Suppliers of seed are encouraged to indicate the provenance of their original seed collections. Gardeners should be aware of these issues and bear them in mind when selecting sources of wild flowers, whether as seeds or plants.

Establishment

The establishment of native wild flowers in flower beds requires no more than the usual care one would

Photo: Harry Smith Collection



Bluebells (*Hyacinthoides non-scripta*)

Creeping buttercup (*Ranunculus repens*)



take for any other garden plant in the preparation and choice of site.

However, even small areas of wild flower grassland require some thought and effort, not only in preparation of the site and the method of introduction, but also in the management regime throughout the year. A list of wild flowers typical of the local area can be obtained from the Postcode Plants Database. [www.nhm.ac.uk/science/projects/fff/index.htm]

From existing grassland

Stop using fertilizers and herbicides, and remove grass cuttings to reduce the soil fertility. The most reliable means of establishing plants in grass sward is to use pot-grown specimens or plug-plants. Choose sturdy plants for either spring or early autumn planting and encourage good root growth by watering as necessary. As far as possible the potting compost should be worked out of the root ball before planting.

Newly cleared sites

On a newly-cleared site, introduction using seed can be effective. Wild flower seed merchants supply mixtures of wild flowers and grasses suitable for various soil types and situations. Choose one that suits your

local conditions and sow at the rate of about 5g/sq m. Where possible, obtain seed of British origin grown by wild flower seedsmen on their own land. Plants should not be taken from the countryside.

Sow seeds during March and April or in September, depending on soil conditions. On lighter soils, autumn-sown seeds generally germinate and establish quickly, although some will not come up until the following spring. This delay makes it advisable to wait until March or April on heavy soils, as waterlogging may cause the seed or seedlings to rot during winter.

It is important not to add fertilizers, which encourage excessive vigour in the grasses to the detriment of wild flowers. However control of undesirable weeds prior to sowing is critical. Digging to a depth of 15–20cm will help bury weeds and bring less fertile soil to the surface. Where perennial weeds are a problem, the use of a glyphosate-based systemic weedkiller may be needed. Woody weeds can be controlled by a brushwood killer containing 2,4-D/dicamba/mecoprop-P.

The aim is to establish an area of mixed grasses combined with wild

flowers. The grasses should not include vigorous species such as ryegrass (*Lolium perenne*) or cocksfoot (*Dactylis glomerata*). Proprietary seed mixtures are available related to the type of soil and situation, and a mixture of 85% grasses and 15% wild flower seeds is suitable. Seeds should be broadcast and the seedbed lightly raked over. Spring sowings may require irrigation to aid establishment.

Annual management

Regular management is important to allow the more desirable species to flourish and to reduce the vigour of the more rampant constituents. During the first year of establishment, cut to a height of 5cm up to four times during the summer. Subsequently the mowing, cutting or grazing regime will depend on the season for which maximum flowering impact is required: if this is to be spring, delay cutting until after the end of June, and for a high summer meadow delay cutting until September. Aim to leave the cut until the most desirable species have seeded, and leave the cut stems for a few days to allow any remaining seed to fall onto the soil. The hay must then be raked up and removed from the site. On no account should fertilizers be applied to the sward at any time. Unwanted perennial weeds can be spot-treated with a glyphosate-based herbicide.

Cornfield annuals

Where soil fertility is too high to allow perennial wild flowers to flourish, consider sowing a cornfield annual mix that includes plants such as cornflower, corn poppy, corn marigold and corncockle. Some barley or wheat seed will add an authentic touch. Sowing should be done on bare soil, free of perennial weeds, in a sunny position. Autumn sowing generally favours poppies, while

spring sowing favours corncockle. Many plants will flower within three months of sowing. Leave the plants to self-seed, clear them away in spring and rake over the ground to remove weeds and encourage seed to germinate. Additional sowings may be required in the first few years until the wild flower seed bank has built up.

Alien and random introductions into the countryside

The Royal Horticultural Society condemns the random scattering of seed of either native or alien plants in the countryside. Any attempts at establishing plants in this way are ecologically undesirable. Weeds and unwanted plants should be composted or taken to council waste disposal centres; plant material from a garden should never be dumped outside the garden boundary.

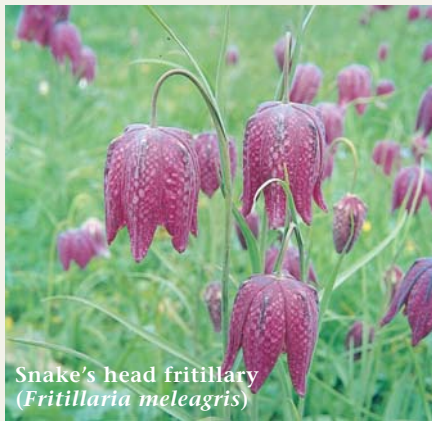


Photo: Harry Smith Collection

Snake's head fritillary
(*Fritillaria meleagris*)

Sources of further advice

Local or county conservation groups – details of which are usually available from public libraries

The Botanical Society of the British Isles, c/o Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD, tel 0207 942 5002 (answerphone) [www.bsbi.org.uk]

Countryside Council for Wales, Maes-y-Ffynnon, Penrhosgarnedd, Bangor, Gwynedd LL57 2DW, tel 0845 1306229 [www.ccw.gov.uk]

English Nature, Northminster House, Peterborough PE1 1UA, tel 01733 455000 [www.english-nature.org.uk]

Joint Nature Conservation Committee, Monkstone House, Peterborough PE1 1JY, tel 01733 562626 [www.jncc.gov.uk]

Plantlife, 14 Rolleston Street, Salisbury, Wiltshire SP1 1DX, tel 01722 342730 [www.plantlife.org.uk]

Scottish Natural Heritage, 12 Hope Terrace, Edinburgh EH9 2AS, tel 0131 4474784 [www.snh.org.uk]

The Wildlife Trusts, The Kiln, Waterside, Mather Road, Newark NG24 1WT, tel 0870 036 7711 [www.wildlifetrusts.org.uk]

World Wide Fund for Nature, Panda House, Weyside Park, Godalming, Surrey GU7 1XR, tel 01483 426444 [www.wwf.org.uk]

The Postcode Plants Database

www.nhm.ac.uk/science/projects/fff/index.htm

Fauna and Flora International, Great Eastern House, Tenison Road, Cambridge CB1 2TT, tel 01223 57100 [www.fauna-flora.org]

Flora Locale, Denford Manor, Hungerford RG7 0UN, tel 01488 680457 [www.floralocale.org]

National Wildflower Centre, Court Hey Park, Roby Road, Liverpool L16 3NA, tel 0151 7381913 [www.nwc.org.uk]

Landlife, c/o National Wildflower Centre (address above), tel 0151 7371820 [www.landlife.org.uk]

Some useful references

- Baines, C. (2000) *How to Make a Wildlife Garden*. Frances Lincoln Ltd
- Chambers, J. (1988) *Wild Flower Gardening*. Elm Tree Books
- Gibbons, B & L. (1996) *Creating a Wildlife Garden*. Chancellor Press
- Huntington, L. (2002) *The Wild Garden*. Cassell & Co
- Lickorish S, Luscombe, G & Scott, R (1997) *Wild Flowers Work – a technical guide to creating and managing wildflower meadows*. Landlife, Liverpool
- Rees, Y. (1991) *Wildflower Gardening*. The Crowood Press
- Slatcher, J. (2000) *Gardening with Wild Plants*. Guild of Master Craftsmen Publications Ltd
- Stevens, J. (1987) *The National Trust Book of Wildflower Gardening*. Dorling Kindersley
- Lewis, P. (2003) *Making Wildflower Meadows*. Frances Lincoln

Sources of wild flower seeds and bulbs

A list of suppliers of wild flower seeds of British provenance is available from Flora Locale. Suppliers of bulbs, corms and tubers produced by cultivation is available from Fauna and Flora International.

Choice of species

Suitable grasses for wild flower seed mixes

- Agrostis capillaris* (common bent)
Alopecurus pratensis (meadow foxtail)
Anthoxanthum odoratum (sweet vernal grass)
Cynosurus cristatus (crested dog's tail)
Festuca ovina (sheep's fescue)
Festuca rubra (red fescue)
Hordeum secalinum (meadow barley)
Phleum bertolonii (smaller cat's tail)
Poa pratensis (smooth meadow grass)
Poa trivialis (rough meadow grass)
Trisetum flavescens (yellow oat grass)

Some wild flowers for the spring meadow

- Cardamine pratensis* (lady's smock)
Fritillaria meleagris (snake's head fritillary)
Hypochaeris radicata (cat's ear)
Leontodon hispidus (rough hawkbit)
Leucanthemum vulgare (ox-eye daisy)
Primula veris (cowslip)
Primula vulgaris (primrose)
Prunella vulgaris (self heal)
Ranunculus acris (meadow buttercup)
Rhinanthus minor (yellow rattle)
Sanguisorba minor (salad burnet)
Stellaria graminea (lesser stitchwort)

Some wild flowers for the summer meadow

- Achillea millefolium* (yarrow)
Campanula rotundifolia (harebell)
Centaurea nigra (common knapweed)
Centaurea scabiosa (greater knapweed)
Galium verum (lady's bedstraw)
Hypericum perforatum (perforate St John's wort)
Knautia arvensis (field scabious)
Malva moschata (musk mallow)
Origanum vulgare (marjoram)
Succisa pratensis (devil's bit scabious)
Tragopogon pratensis (goat's-beard)

Bulbs, corms and tubers for establishing in grassland

- Colchicum autumnale* (meadow saffron)
† *Fritillaria meleagris* (snake's head fritillary)
Galanthus nivalis (snowdrop)
† *Narcissus obvallaris* (Tenby daffodil)
† *Narcissus pseudonarcissus* subsp. *pseudonarcissus* (wild daffodil)
Scilla autumnalis (autumn squill)
Scilla verna (spring squill)
† most satisfactory where grass is not vigorous and is unmown until July

Bulbs, corms and tubers for establishing in woodland or shade

- Allium ursinum* (ramsons)
Anemone nemorosa (wood anemone)
Arum maculatum (cuckoo pint)
Hyacinthoides non-scripta (English bluebell)

Photo: Harry Smith Collection



Cowslip (*Primula veris*)

Cornfield annuals

Agrostemma githago (corncockle)
Anthemis arvensis (corn chamomile)
Centaurea cyanus (cornflower)
Glebionis segetum (corn marigold)
Papaver rhoeas (corn poppy)

Wild flowers for mown lawns

Ajuga reptans (bugle)
Bellis perennis (lawn daisy)
Hippocrepis comosa (horseshoe vetch)
Lotus corniculatus (bird's foot trefoil)
Taraxacum officinale (dandelion)
Trifolium dubium (yellow trefoil)
Trifolium repens (white clover)

Other leaflets in the RHS Guidelines series can be read and downloaded from www.rhs.org.uk/publications. They can be obtained by post by sending an A4 SAE to A W Mailing Services Ltd, PO Box 38, Ashford, Kent TN25 6PR (98p postage for the full set).



January 2005

Source: The Science and Advice Departments, The Royal Horticultural Society's Garden, Wisley, Woking, Surrey GU23 6QB

*The mention of any product, supplier or service does not constitute an endorsement by the Society.
RHS copyright. Not to be copied or reproduced without prior permission.*