BEANT

Gardening without harmful invasive plants

A guide to plants you can use in place of invasive non-native species

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Research Centre Agroecology, Water and Resilience Aquatic Biosecurit Partnership

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Gardening without harmful invasive plants

Help protect the environment by using these plants in place of invasive non-native species

With over 80,000 species and varieties of plants to choose from and with new varieties being introduced each year, it is no wonder we are a nation of gardeners. Plants are vital for our health and the environment. They improve air quality, boost our mood, help to offer climate change resilience and provide a home for other wildlife.

Many of the plants in our gardens and ponds are not native to Britain - they have been introduced from all over the world by people. While non-native plants can help us to create beautiful ornamental displays to enjoy, some become invasive and can cause problems for you and the environment.

Although only a small minority of plants are invasive, the impact they can have is extensive and may be irreversible.

Here are a few examples of the impacts of invasive non-native plants:

- Crowding out native plants which other species rely on for food or shelter
- Changing soil conditions and nutrients
- Spreading plant diseases which threaten native species
- Clogging waterways and reducing oxygen availability in the water
- Damaging buildings and infrastructure and interfering with agriculture and utilities
- Intefering with recreation, making it harder for us to take part in activities such as fishing, sailing or paddling
- Harming our health

Trying to remove problem plants from natural habitats, especially important nature conservation sites, is expensive and difficult. Often complete eradication is impossible, and millions of pounds are spent each year to limit their spread.

In your garden invasive non-native plants can quickly outgrow their space or become entrenched so that no matter how hard you try to eliminate them, and regardless of how much of your flower bed is dug up, new shoots may keep on appearing.

Find more information about non-native speciesat nonnativespecies.org including:

- Information on non-native species
- ID sheets for over 60 species
- More guidance on preventing the spread of invasive plants
- Information on volunteering to help manage invasive plants in the wild

How to use this guide

Choose one of the plants in this booklet to help prevent future invasions.

Invasive non-native plants have sometimes been used in the past for difficult areas of your garden – a particularly exposed patch, for example, or where a bare wall needs to be covered quickly.

This booklet provides examples of plant species that do the same, or similar, 'jobs' as invasive plants and can be used in their place.

Each section also includes an example of a damaging invasive non-native plant that should be avoided.

For more information on the plants in this booklet we recommend visiting the RHS Plantfinder.



Gardening for wildlife

Help to make your garden a haven for wildlife – see pages 8-12 and look out for species with these symbols.

Contents

- Plants for wildlife
- Groundcover plants
- Naturalising plants and bulbs
- Architectural plants
- Climbers
- Shrubs
- Trees
- Plants for ponds and bog gardens
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- Floating plants
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- About the list

Did you know that it's against the law to share or sell some garden and pond plants?

Find more information at nonnativespecies.org/beplantwise.

Key to symbols Tolerant of shade / low light levels Needs sun C PHT Needs alkaline conditions pH= **Neutral conditions** PH1 Needs acidic conditions P Needs drier soils (**3 3 3** Moist but well drained soils Needs wetter soils Needs sheltered position 9 **Attractive flowers** Attractive foliage Ø **E** 7 Fine autumn colours (×) Bears ornamental fruit Structural feature or screening / hedging (\mathbf{m}) Windbreak ್ಳಿ 2 Berries for birds **RHS Plants for Pollinators** ۵ Provides shelter/cover for wildlife (T) Submerged aquatic plant X Floating aquatic plant M/ Marginal/emergent aquatic plant Bog garden plant

Native to UK

A plant with no symbols is able to cope with a broad range of conditions. These characteristics are summarised in a table at the back of this booklet. UK native plant classifications are taken from the Botanical Society of Britain & Ireland's Online Atlas of the British and Irish Flora, 2022.

Gardening Tips

Know what you grow

Choose the right plants for your garden, pond, aquarium and water features.

Research plants before you buy them to make sure they are suitable for your needs, easy to dispose of, and won't be invasive.

Take care before giving or accepting cuttings, as you may accidentally pass on invasive plants, pests or plant diseases.

Stop the spread

Keep your plants in your garden, don't plant them, or allow them to grow, in the wild. Even native plants can cause a problem if they are planted in the wrong place.

If you already have invasive plants in your garden, remove seed heads and pods regularly to stop them spreading on the wind.

Position new plants away from the edge of your garden so they can't 'jump the fence' and spread into the wild, and pull out any runners and seedlings that start to spread further.

Compost with care

Make sure nothing you remove from your garden or pond gets into the wild, you could be breaking the law if it does.

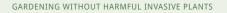
Most plants can be composted to boost your soil, or put in your garden waste bin (but remember to check first what your local council will accept).

Be aware that some plants such as Japanese knotweed have extra controls around their disposal, find out more about disposing of plants safely at nonnativespecies.org/beplantwise.



future invasions simply by reporting plants which are spreading in your garden and proving hard to control. Do you have a plant in your garden that is spreading and proving hard to control? Submit your records at bsbi. org/plant-alert to help scientists identify which species are likely to become a problem in the wild in the future.

If you think you've spotted an invasive plant in the wild, you can report it online through iRecord. Find out more at nonnativespecies.org/recording.



OMPOS









Impatiens glandulifera

Himalayan balsam

INVASIVE!

Himalayan balsam was promoted as a garden plant in the Victorian period and is now widespread in the UK, causing erosion, damage to infrastructure, and loss of biodiversity.

Help prevent future invasions by choosing one of the following species.

Galium odoratum

Sweet woodruff

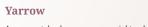
A UK native. This vigorous perennial forms a wide mat of erect stems to 30 cm tall, bearing whorls of bright green leaves, with terminal clusters of small white, starry flowers from late spring. Ideal under hedges, trees, underplanting for shrubs and wildlife gardens. Hay-scented when dry.

Veronicastrum virginicum

Culver's Root

Perennial to 2 m or more bearing architectural whorls of toothed foliage and tall wands of lilac flowers.





Achillea millefolium

A compact, herbaceous perennial to about 50 cm tall with aromatic, ferny foliage that normally overwinters as a basal rosette. Produces flat clusters of small pink/ cream daisy-like flowers on upright stems from early summer to early autumn.

Baptisia australis

False indigo

A herbaceous perennial with blue-green, trifoliate leaves and erect, lupin-like spires of violet-blue flowers in early summer forming a clump to 1.2 m tall. Followed by attractive inflated, dark grey seed pods. Prefers a sunny acidic border, or in pots for a dramatic display. Dislikes being disturbed.

Helleborus foetidus

Stinking hellebore

Evergreen perennial to 80 cm tall with erect stems and palmately-divided leaves with narrow, dark green leaflets. Nodding, usually purple-edged, pale green flowers, in large open clusters from midwinter to mid-spring. Prefers part shade. Ideal for underplanting, low maintenance and courtyard gardens.

Hylotelephium spectabile

Butterfly Stonecrop

Easily propagated, fleshy perennial with flat heads of (usually) pink flowers. For best wildlife value sterile hybrids should be avoided. Neutral, moderately fertile soil is best.

Digitalis purpurea

Foxglove

Biennial forming a neat rosette of hairy leaves in the first year followed in the second by graceful, one-sided spikes to 2 m tall of tubular, purple flowers with maroon spots on the inside. UK native, highly attractive to pollinators.

Matthiola longipetala subsp. bicornis

Night-scented Stock

Highly scented annual with linear or lobed, grey-green leaves to 8 cm long. In summer four-petalled flowers (2 cm across) in shades of pink and purple are borne in loose racemes. Popular with pollinators.

Angelica gigas

Purple Angelica

Herb to 2 m tall with toothed, pinnate leaves. Dark red umbels of flowers are borne on red stems in late summer. Biennial or short-lived perennial.



















Orlaya grandiflora

White laceflower

A branching annual, 45 to 75 cm tall with jaggedly divided leaves and white lacy flowers in flattish umbels. Long flowering and attractive to insects.

Sanguisorba officinalis

Burnett

Sanguisorba are herbaceous perennials with attractive, pinnate leaves and branched stems bearing terminal spikes of small fluffy flowers with conspicuous stamens.

Valeriana officinalis

Ceanothus thyrsiflorus

Common Valerian

Pinnate-leaved, clump-forming perennial to 80 cm tall or more with upright stems bearing flat-topped pink or white flowerheads.

Dense evergreen shrub providing cover and shelter for wildlife. Bears bright

blue flowers in early summer. Hardy in all but the coldest areas.

Californian Lilac



Hamamelis vernalis

Spring Witch-hazel

Upright shrub bearing spidery yellow or orange flowers on bare twigs in winter and spring. The leaves turn clear yellow in autumn. Easy to grow in an open but unexposed site. Will tolerate deep, humus-rich soils.

Hyssopus officinalis

Hyssop

Dwarf semi-evergreen sub-shrub to 60 cm tall with small, dense, aromatic foliage and spikes of two-lipped, dark blue flowers from midsummer.

Chimonanthus praecox

Wintersweet

Strong-growing deciduous shrub to 4 m tall with glossy lanceolate leaves to 20 cm long. Nodding, deliciously fragrant, greenish-yellow flowers are produced on the bare twigs in winter. The flowers are often purple inside and up to 2.5 cm wide.

Erica x darleyensis

Darley Dale Heath

Low-growing shrub with needle-like leaves, bearing flowers in late winter and spring. Flowers are urn-shaped, usually in shades of pink and form racemes to 10 cm long. Many cultivars are available. Alkaline soils may be tolerated.

Heliotropium arborescens

Common Heliotrope

Bushy, low-growing short-lived shrub best grown as an annual with dark, wrinkled leaves and flat heads of violet-blue flowers that are carried in summer

Sambucus nigra f. porphyrophylla 'Gerda'

Sambucus nigra f. porphyrophylla 'Gerda'

A deciduous shrub or small tree, with deep purple foliage from spring to autumn. Striking flat heads of scented pinkish-purple flowers, followed by purple-black berries.





















Viburnum opulus

Guelder-rose

Vigorous deciduous shrub to 4 m tall bearing lobed leaves that turn red in autumn. Its lacecap flowers are followed by glossy red fruit.

Viburnum x *bodnantense*

Bodnant Viburnum

Deciduous shrub to 3 m tall bearing toothed leaves to 10 cm long that have a reddish tinge when young. The highly fragrant, tubular flowers in shades of pink are borne in clusters at the ends of the branches.

Ilex aquifolium

Holly

Hardy evergreen shrub bearing spiny, glossy foliage when young. Available in a range of variegated cultivars. Female plants bear red berries. Good as a windbreak

Eupatorium cannabinum

Hemp-agrimony

A vigorous upright perennial with reddish stems, leaves divided into narrow leaflets, and dense domed clusters of tiny light pink to purple flowers in late summer and early autumn. UK native. Plant for pollinators.

Crataegus laevigata 'Paul's Scarlet

Hawthorn 'Paul's Scarlet'

Thorny, deciduous tree to 8 m tall. Bears a great profusion of bright red-pink, very double flowers in late spring.

Carpobrotus edulis

Hottentot fig

INVASIVE!

Hottentot fig was introduced into Britain as an ornamental garden plant in the 17th century and has since become established in parts of the UK. It changes the nutrient dynamics and acidity of the soil, preventing other plants from surviving. Choose one of the following plants instead to help prevent future invasions Help prevent future invasions by choosing one of the following species.

Calluna vulgaris

Heather

Variable shrub to 60 cm tall with tiny, densely packed leaves and bell-shaped, often pink flowers. A great range of cultivars selected for flower and foliage characters is available. A good option for erosion control at inland sites.



Sea-kale

Spreading perennial to 75 cm tall with large, thick, lobed, glaucous leaves and dense racemes of white, cross-shaped flowers in early summer.

Epimedium x perralchicum

Barrenwort 'Fröhnleiten'

A strong growing evergreen perennial to 40 cm in height, forming a mat of leaves divided into 3 to 5 spiny-edged, ovate leaflets. Open sprays of bright yellow flowers in spring.

Asarum splendens

Chinese wild ginger

Forming a mat of long-stalked, heart or kidney-shaped leaves, some with attractive silver mottling. Unusual flowers consisting of a 3-lobed calyx, often in "earthy" colours. Commonly referred to as wild gingers (they are not culinary gingers) because their rhizomes have a similar spicy scent.























Ajuga reptans

Bugle

Spreading perennial with attractive evergreen foliage forming dense mats, with whorled two-lipped flowers forming short spikes. Deep blue flowers from late spring to early summer.

Bergenia cordifolia & hybrids

Elephant-ears

Robust perennials spreading on thick, branching rhizomes. Leaves are large, glossy and paddle-like and purple-tinged in winter. The flowers are usually in shades of pink, borne on fleshy stems. Good for sheltered sites but intolerant of drought.

Convallaria majalis Lilly of the Valley

A highly fragrant perennial to 25 cm in height, forming extensive colonies. Erect racemes of nodding, white bell-shaped flowers arise from the paired, elliptic leaves.

Leucothoe fontanesiana **Drooping Laurel**

Shrub to 2 m or so with arching branches carrying evergreen, leathery, lanceshaped leaves and small white flowers in spring. Variegated cultivars are available. Needs a sheltered position.

Pachysandra terminalis

Carpet Box

Evergreen perennial spreading on smooth stems from which are produced deeply cut, glossy, dark green leaves. Small white flowers are produced in early summer.

Sanicula epipactis

Broad-leaved sanicle

A perennial forming a compact clump of glossy leaves, preceded by tight heads of tiny yellow flowers within rosettes of toothed, oblong, yellow-green bracts. Suiting the woodland style garden.

Tiarella cordifolia

Foam flower

An herbaceous perennial to 30 cm in height, with 3 to 5-lobed, broadly ovate leaves becoming bronze-tinged in autumn. Erect stems bearing open racemes of small, creamy-white flowers in summer.





Viola odorata

Sweet Violet

Rhizomatous perennial bearing toothed, heart-shaped leaves and, in winter or early spring, perfumed blue or white spurred flowers.

Waldsteinia ternata

Siberian Waldsteinia

Rhizomatous, semi-evergreen perennial with lobed, toothed leaves above which are borne bright yellow, open flowers to 1.5 cm across in late spring and early summer.

Frankenia laevis

Sea-heath

Coastal evergreen, mat forming perennial with tiny leaves and the general appearance of a heather. Produces small pink flowers. Found naturally in saltmarsh/ sand dune transition zones and saltmarshes. Suits coastal, rock and gravel gardens.











Genista pilosa

Hairy Greenweed

A drought tolerant creeping shrub with bright yellow pea like flowers and deep green foliage. Preferring well drained sandy soils. Ideal for the gravel or rock garden. Will tolerate dapple shade, prefers full sun.

Geranium 'Mavis Simpson'

Crane's-bill 'Mavis Simpson'

Herbaceous perennial to 30cm tall with silvery, lobed leaves. It bears open flowers (to 3.5 cm wide) that are pale pink with darker veins. Grows in any moderately fertile soil but not in waterlogged areas. Ideal for underplanting shrubs, roses, rock and gravel gardens.



Geranium pratense

Meadow crane's-bill

A clump-forming perennial with hairy stems and deeply-lobed foliage. The saucer-shaped, white, blue or violet flowers are 4 cm across and appear in early to mid-summer.



Geranium sanguineum var. striatum

Striped Bloody Crane's-bill

Herbaceous perennial to 15 cm tall with deeply cut leaves on long spreading stems. Produces large, very pretty, open flowers with very pale pink petals that are darker along the veins.



Silene uniflora 'Robin Whitebreast' Sea Campion 'Robin Whitebreast'

Semi-evergreen perennial with lance-shaped grey-green leaves borne on prostrate stems. Bears white, double flowers with cut petals.

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Veronica perfoliata

Digger's Speedwell

Evergreen perennial bearing low, arching stems with pairs of stalkless, rounded, glaucous, leathery, toothed leaves to 5cm long. Attractive racemes of blue flowers are borne in late summer.





Naturalising plants

Hyacinthoides hispanica

Spanish bluebell

INVASIVE!

Introduced into British gardens in the 17th century and was first recorded in the wild in the early 20th century. Spanish bluebell hybridises with the native bluebell which may lead to the native species being lost, reducing biodiversity. Help prevent future invasions by choosing one of the following species.

Asphodeline lutea

Yellow Asphodel

Tall, fleshy-rooted perennial forming clumps of narrow, glaucous leaves topped by dense spikes of fragrant yellow flowers. Grows to 1.5 m high.

Colchicum autumnale

Meadow Saffron

Cormous perennial producing copious pink, goblet-shaped flowers (to 15 cm), followed by lance-shaped leaves. Double-flowered cultivars are available.







Naturalising plants





Perennial to 3 m tall with domed heads of purple flowers over whorls of dark foliage in mid to late summer. Prefers moist soil in full sun or part shade.

Gillenia trifoliata

Echium vulgare

Bowman's root

Joe Pye Weed

A rhizomatous perennial with reddish stems bearing small, 3-lobed leaves and open sprays of starry white flowers. Prefers acidic to neutral moist but well drained soil in part shade.

Bushy biennial bearing bristly, narrow leaves and in the second year purple,

Eupatorium maculatum Atropurpureum Group

pink-tinged, bell-shaped flowers in dense inflorescences.

Polemonium caeruleum

Erect perennials with a spreading habit. Pinnate leaves and usually clustered, tubular, bell, or funnel-shaped flowers. Self-seeds freely.

Geranium sylvaticum

A medium-sized, deciduous perennial with divided, toothed leaves. Flowers are borne in May and June generally being violet-blue with a white centre. It is a UK native of woodland and meadows.



banks / marsh







Galtonia candicans

Summer Hyacinth

Water avens

A herbaceous perennial with bright green, lobed basal leaves. The flower stems and sepals are flushed with dark red, and the dusky pink or pale orange, drooping flowers appear from late spring to midsummer.

UK native. Clumping perennial herb for shallow soil in open grassy places. Erect stems of golden yellow flowers to 70 cm tall in late summer and

Bulbous perennial with fleshy, lance-shaped leaves and leafless stems to 1.2

m tall. Bears pendant, white, bell-shaped flowers that are each 5 cm long.

Soils need to be moist in spring and summer but drier over winter.

Aster linosyris **Goldilocks** Aster

early autumn.

Common Harebell

Campanula rotundifolia

UK native spreading perennial to 30 cm tall with heart-shaped leaves. Slender stems bear nodding bell-shaped flowers, usually in shades of blue. Suitable for rock gardens, sunny banks or walls.

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Kniphofia rooperi

Rooper's Red-hot-poker

Imposing perennial to 1.2 m tall with clumps of broadly linear leaves and impressive, fat heads of red hot poker flowers in autumn.



Naturalising plants







Ligularia 'Gregynog Gold' Leopard Plant 'Gregynog Gold'

> Award-winning hybrid with rounded leaves to 35 cm long. Bears pyramids (to 1.8 m tall) of golden daisy flowers 10 cm across in late summer and autumn. Needs protection from very hot sun.

Aethionema 'Warley Rose'

Stone Cress 'Warley Rose'

Semi-evergreen subshrub with narrow grey green leaves (to 1 cm wide) and abundant racemes of bright pink, cross-shaped flowers in late spring and summer.

Iberis saxatilis

Alpine Candytuft

Evergreen subshrub forming a cushion of fleshy leaves to 2 cm long. The small, white, cross-shaped flowers are borne in late spring and summer. Prefers very well drained soils.





Vigorous, bulbous perennial to 80 cm producing bright green, channelled leaves and large, upright spikes of starshaped, showy blue flowers. Intolerant of waterlogging.

Camassia quamash

Common Camassia

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Colchicum speciosum

Giant Meadow Saffron

Vigorous, cormous perennial to 18 cm tall with narrow leaves. Goblet-shaped flowers are pink-purple, often with a white throat.

Crocus banaticus

Byzantine Crocus

Cormous perennial to 10 cm tall producing solitary, purple flowers. The outer tepals are large and boat-shaped, the inner much smaller. Leaves are dark green and linear.

Crocus biflorus

Silvery Crocus

Variable cormous perennial to 6 cm tall carrying flowers which have yellow throats and can be found in shades of blue or white, sometimes with purple striping.



Crocus etruscus

Cormous perennial to 8 cm tall usually seen with lilac-blue flowers that are finely veined. Leaves are produced after the flowers.

Crocus laevigatus

Variable cormous perennial to 8 cm tall with usually white to lilac, fragrant flowers often with distinct feathering. Flowers are produced simultaneously with the dark green, linear leaves.

Dierama pulcherrimum

Angel's Fishing-rod

Cormous perennial to 1.5 m tall with narrow, grass-like leaves and graceful, arching stems of pendant, bell-shaped flowers in shades of pink. It requires plentiful water when in growth and may be susceptible to hard frost.













Heracleum mantegazzianum **Giant hogweed**

INVASIVE!

Introduced to gardens as a monumental curiorsity in the Victorian era and is now widespread across the UK. The sap of giant hogweed contains toxins which cause nasty skin burns on exposure to sunlight, avoid handling this plant. Help prevent future invasions by choosing one of the following plants instead.

Carex flagellifera 'Glen Murray'

Tussock sedge

C. flagellifera is a clump forming evergreen perennial, with narrowly linear, reddish-brown leaves, showing eye catching light brown flower spikes on stems to 1 m tall in late summer.

Allium atropurpureum

Very-dark purple allium

A hardy perennial bulb, up to 60 cm tall, with strap-shaped green leaves. Deep purple-red flowers up to 5 cm across on upright stems in late spring and early summer. Beautiful cut flower.





A giant perennial bulb with strap-shaped leaves, up to 1 m long. Spires of loosely-packed, greenish-white flowers, topped with a cluster of leafy bracts, up to 2 m tall in late summer and early autumn. Needs a warm, sunny position in well drained soil.

Deschampsia 'Goldtau'

Deschampsia Goldtau

A smaller-growing Deschampsia variety.. Dark green leaves age to golden brown. The long-lasting flower plumes, held up to 75 cm, are silvery brown and green, turning warm gold as they mature, giving a shimmering effect

Melica uniflora f. albida

A delicate creeping perennial grass with bright green deciduous foliage. White flowers appear from June to July. Well suited for shrub/ hedge underplanting and in wildlife gardening. Avoid waterlogged soil. Thrives in dryish alkaline soil.

Milium effusum 'Aureum'

A semi-evergreen perennial grass forming loose clumps of large arching, soft yellow leaves, with nodding panicles of yellow flowers in early summer. Intolerant of full sun on poor dry soils

Astelia chathamica

Silver Spear

Clump-forming evergreen perennial to 1.2 m tall bearing clumps of broad, channelled, silvery leaves. Yellowish green flowers are sometimes produced and followed by orange berries on female plants.

Ampelodesmos mauritanicus

Impressive grass to 3 m tall with arching, evergreen foliage and tall stems bearing pendant flowers.

Nicotiana sylvestris

Flowering Tobacco

Biennial, or short-lived perennial, to 1.5 m tall. Produces a rosette of dark leaves from which emerges an inflorescence bearing strongly fragrant white flowers with long tubes to 10 cm. May survive outdoors but best raised from seed each year.





























Aralia cachemirica Angelica-tree

Huge leaves to 1.2 m long divided into shiny leaflets above which appear spikes of starry umbels to 3 m tall.

Cirsium heterophyllum

Melancholy thistle

A clump-forming, spreading perennial up to 1.2 m tall with distinctive solitary flower heads of red purple flowers. The lance-shaped, green leaves have softly-spined edges and white-felted undersides.

Greater Sea-kale

Crambe cordifolia



Datisca cannabina

Cretan Hemp

Slender stems to 3 m bear delicate, dissected leaves and tassels of green flowers. Ideal for the back of the border.

Huge clumps of heart-shaped foliage to 1.5 m across are topped by

branching sprays of small white flowers to 2 m high.



Rheum palmatum

Ornamental Rhubarb

A huge ornamental rhubarb to 2.5 m tall or more with large, deeply lobed leaves and upright spikes of small greenish flowers.

Thalictrum rochebruneanum

Meadow-rue

Much-divided foliage bears frothy lavender and yellow flowers to 3 m or more in height.

Athyrium filix-femina

A vigorous deciduous fern with erect fresh green lacy fronds to 80 cm or more. They are especially shade-tolerant.





Anthriscus sylvestris 'Ravenswing'

Cow Parsley 'Ravenswing'

Biennial, or short-lived perennial, to 1 m tall with lacy, dark foliage. Umbels of pink flowers on slender stems are carried early in the season.



Iris 'Black Swan'

Iris - Black Swan

An herbaceous bearded iris perennial, to around 90 cm tall, with narrow, pointed, grey-green leaves. In late spring and early summer flowers of deep purple appear.



Take care before giving or accepting cuttings as you may accidentally pass on invasive plants, pests or plant diseases. Find more gardening tips on page 6.















Parthenocissus inserta

False Virginia creeper

INVASIVE!

Introduced to gardens as an ornamental climber in Victorian times. Its prolific growth has caused introductions from garden cast outs. Scales most trees and shrubs blocking light from reaching the host and plants below, causing branches to break due to the additional weight, and strangling trees.

Help prevent future invasions by choosing one of the following plants.

Stauntonia hexaphylla

Stauntonia vine

A vigorous climber with leathery elliptic leaves. Flowers in racemes of fragrant, dull pink flowers 2 cm in length, sometimes followed by ovoid purplish fruits to 5 cm in length. Ideal for a warm sheltered wall.

Actinidia kolomikta

Kolomikta

Vigorous twining climber to 5 m or more, rarely producing its small flowers but bearing large leaves that become attractively variegated white and pink in the upper half.

Ceanothus arboreus 'Trewithen Blue'

Evergreen shrub to 5 m or so with glossy, dark green, oval leaves to 10

cm long. In spring and summer frothy heads of blue flowers are borne in

Californian Lilac 'Trewithen Blue'

Clematis 'Étoile Violette

abundance. May be damaged by frosts.

Clematis

A large, vigorous deciduous climber with mid green leaves. Profuse single deep purple velvety flowers to 10 cm in width produced mid to late summer.

Clematis x durandii

Durrand clematis

A medium-sized deciduous, non-twining perennial with long stems with simple ovate leaves to 12 cm long. Ideal for a border where it can be supported by other plants. Indigo blue flowers to 10 cm across appear in early summer to early autumn.

Clematis macropetala

Clematis

A robust, deciduous climber with attractive, toothed leaves. Featuring single nodding pale blue to violet-blue flowers 3 to 4.5 cm long and many smaller, appearing semi-double. Flowers in spring with some blooms in late summer.

Hedera algeriensis 'Gloire de Marengo'

Algerian Ivy 'Gloire de Marengo'

Large-leaved ivy with creamy marginal variegation and long, easily trained stems. Tolerant of a wide range of conditions once established.

Hedera helix

Ivv

Climbing or scrambling plant eventually becoming shrubby. Non-variegated selections have the best chance of producing the nectar-rich flowers, but these will need at least some sun. Prefers alkaline soils.

Hydrangea petiolaris

Climbing Hydrangea

Deciduous climber with leaves turning deep yellow before falling in autumn. Grows to 10 m or more and carries large domes of white flowers. Avoid shallow, chalky soils. Best grown in partial shade.























Indigofera heterantha

Himalayan Indigo

Spreading shrub to 3 m tall bearing pinnate, grey-green leaves to 10 cm long on arching branches. Throughout summer racemes of purple-pink pea flowers are produced.

Itea ilicifolia

Holly-leaved Sweet-spire

Evergreen shrub with arching, flexible shoots to 5 m tall and sharp-pointed, glossy leaves to 10 cm long. Pendant racemes (to 30 cm long) of small, greenish flowers from midsummer into autumn. Needs shelter from cold winds.

Lonicera periclymenum 'Graham Thomas'

Honeysuckle 'Graham Thomas'

Strong-growing, twining climber to 7 m. Very fragrant white flowers, aging yellow, are followed by red fruit. Long flowering season. Best in partial shade, tolerates full sun.



Vitis coignetiae

Crimson Glory-vine

Vigorous, tendril climber with large, lobed leaves to 30 cm across that turn yellow, then bright red, in autumn.

Myrtus communis

Common Myrtle

Evergreen shrub to 3 m bearing a dense coverage of dark green aromatic foliage and, from midsummer, white flowers with prominent stamens which are followed by black fruit. Not fully hardy; shelter from cold winds.

Pileostegia viburnoides

Climbing Hydrangea

Evergreen climber to 6 m with attractively leathery, oblong leaves and creamy white flowers in late summer. May suffer in the coldest winter weather.

Wisteria floribunda cultivars

Japanese Wisteria

Numerous wisteria cultivars are offered. 'Yae-kokuryu' (pictured) has large, very fragrant racemes of double flowers.



Keep your plants in your garden, don't plant them or allow them to grow, in the wild. Even native plants can cause a problem if they are planted in the wrong place. Find more gardening tips on page 6.













Cotoneaster horizontalis

Cotoneaster

INVASIVE!

Cotoneaster has been a highly popular garden plant since the late 19th Century, but has spread rapidly across lowland Britain where it poses a serious threat to biodiversity as it can spread easily into conservation areas where it crowds out other plants.

Help prevent future invasions by choosing one of the following plants.

Buxus sempervirens

Box

Dense-growing, rounded shrub eventually to 5 m tall but responds well to pruning. Leaves evergreen, small and dark green. Produces small and yellowish flowers in spring. Good for dry, shady sites.

Choisya × *dewitteana* White Dazzler'

An evergreen shrub forming a neat mound with aromatic, very slender

clusters during spring and often in late summer and autumn.

green leaves divided into leaflets. Sweetly-scented white flowers appear in

Mexican orange







Garrya elliptica Silk-tassel Bush

Hard-wearing evergreen shrub to 4 m tall with glossy, grey-green, opposite leaves. Highly ornamental catkins are borne in winter and early spring. Good windbreak.

Hamamelis x intermedia

Intermediate Witch-hazel

Shrub to 4 m tall with upright branches which carry green leaves (to 15 cm long) that turn yellow in autumn. In winter the bare twigs bear spidery, fragrant flowers in shades of yellow, orange or red. Various cultivars are available.

Hebe topiaria

Topiarist's Hebe

Dense, low-growing shrub to 60 cm tall with glossy, grey-green leaves to 1.5 cm long. Racemes of white flowers to 2 cm are carried in summer. Good for hedging. Will tolerate maritime exposure but not very cold winds.

Hydrangea serrata

Lacecap Hydrangea

Deciduous compact shrub with opposite leaves to 15 cm long and flattened domes of flowers which bear colourful sterile bracts at the margins. Many cultivars are available.



Ilex aquifolium 'J. C. van Tol'

Holly 'J.C. van Tol'

Self-fertile tree to 6 m tall with glossy evergreen, fairly spine-free leaves and copious bright red berries.

Ligustrum vulgare

Wild privet

Bushy deciduous native shrub with green, lance-shaped leaves and terminal panicles of small, white flowers in summer, followed by small black berries. Very attractive to wildlife.

Osmanthus x burkwoodii

Burkwood Osmanthus

Evergreen shrub to 3 m tall with a dense habit and toothed, dark green leaves. The small, tubular white flowers are extremely fragrant.















Christmas Berry 'Red Robin'

Evergreen shrub growing to 5 m tall but easily pruned to size. White flowers are carried in spring and young foliage is bright red. Needs protection from cold winds.



Viburnum betulifolium

Birch-leaf Viburnum

Pieris japonica Lily-of-the-valley Bush

Zanthoxylum piperitum

frosts.

Deciduous shrub with an upright habit growing to 3 m tall. The white flowers in early summer are followed by pendant clusters of bright red fruit which persist well through the winter.

Neat evergreen shrub to 4 m tall with toothed elliptic leaves that are reddish

A bushy, spiny, deciduous shrub with 15 cm long aromatic dark green leaves.

The bark and fruit are also aromatic. Sprays of small, yellow-green flowers

are produced in early summer, followed by tiny, red fruit with black seed.

when young. Panicles of numerous urn-shaped, white flowers appear from

pink buds. Several cultivars are available. Protect young growth from late



Abelia x grandiflora

Glossy Abelia'

Sichuan pepper

Semi-evergreen shrub to 3 m bearing glossy, dark green leaves and fragrant pinkish white tubular flowers that fall to reveal persistent pink calyces in summer and autumn.

Camellia japonica cultivars

Common Camellia

Evergreen shrubs to 4 m or more, with glossy, toothed elliptic leaves. A huge number of cultivars have been selected often with large double flowers in shades of pink and red.

Chimonanthus praecox 'Luteus'

Yellow wintersweet 'Luteus'

Deciduous shrub to 4 m with open, clear yellow flowers.

Enkianthus campanulatus

Redvein Enkianthus

Deciduous shrub to 4 m or so, with toothed leaves on whorled branches turning yellowish in autumn. Dainty, pendant, bell-shaped, creamy flowers (with red on the veins) are produced in late spring to mid-summer.

Fothergilla x intermedia 'Blue Shadow'

Fothergilla 'Blue Shadow'

Rounded deciduous shrub featuring fragrant cream bottlebrush like flowers in spring. In autumn blue green leaves turn to vivid red, orange and yellow. Tolerates partial shade, full sun encourages better flowering and strong autumn colours.

Fuchsia 'Genii'

Fuchsia 'Genii'

An erect medium-sized deciduous shrub with a bushy habit and yellow-green foliage. Single small but showy reddish-purple pendent flowers.













Hebe rakaiensis

Rakai Hebe

Dense shrub to 1 m tall with glossy green leaves to 2 cm long thickly covering a rounded bush. The white racemes of flowers (to 4cm long) are borne in summer. Good for hedging. Will tolerate maritime exposure but not very cold winds.

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Hydrangea arborescens 'Annabelle'

Hydrangea 'Annabelle'

Annabelle' is a small, bushy deciduous shrub with broadly oval leaves and very large, spherical heads of white flowers to 25 cm across in summer and early autumn.



Hydrangea macrophylla

Mophead Hydrangea

Compact, deciduous shrub to 2 m tall with opposite, broad leaves to 20 cm long. There are many cultivars with domes of flowers in a great range of colours, some with entirely sterile bracts and others with fertile flowers at the centre.



Hydrangea paniculata

Paniculate Hydrangea

A medium-sized deciduous shrub with ovate leaves. Flowers mostly large, white, ageing to purplish-pink, borne in massive, broadly conical panicles from late summer.





Star Magnolia

Deciduous shrub, becoming spreading with age, bearing narrow leaves to 10 cm long. Silky buds carried on the bare branches open into white, star-like flowers, 12 cm across. Shelter from cold winds and avoid transplanting.

Magnolia x soulangeana

Chinese Magnolia

Variable large shrub to 6 m tall with dark green leaves to 20 cm long. Large goblet-shaped flowers (to 30 cm across) ranging from white to purple. Shelter from cold winds and avoid transplanting.

Penstemon newberryi

Mountain Pride

A dwarf evergreen shrub to 25 cm in height, with small, leathery leaves. Tubular, deep rose-pink flowers 4 cm in length are borne in clusters in early summer. Prefers a very gritty well drained position in full sun.



Ribes x beatonii

Gordon's currant

A spreading deciduous shrub to 2 m tall, with aromatic, lobed dark green leaves and dense nodding red and yellow flowers in late spring.

Skimmia japonica 'Nymans'

Skimmia 'Nymans'

A spreading shrub to 1 m x 2 m bearing glossy, evergreen, aromatic foliage. Fragrant white flowers and round, red fruits are freely produced.

Zabelia triflora

Three-flowered zabelia

A large, upright, deciduous shrub to small tree to about 5 m tall. Deeply ridged bark, with dark green leaves. Clusters of small, very fragrant, pink-tinged white, tubular flowers with five petal lobes are produced in summer.













Early Stachyurus Deciduous shrub to 4 m tall with arching stems and egg-shaped leaves. In spring stiff, hanging racemes of bell-shaped greenish yellow flowers are borne on the bare stems. Needs shelter from cold winds.

Sarcococca hookeriana

Sweet Box

Small, suckering shrub to 1.5 m tall forming neat clumps of upright stems with glossy, broadly lance-shaped leaves. In winter, clusters of sweetly fragrant, small white flowers form followed by shiny black fruit. Good for dry, shady sites

Chaenomeles x *superba* 'Rowallane'

Spiny deciduous shrub to 1 m tall bearing glossy green leaves and scarlet

flowers to 4 cm across. Flowers may be followed by yellowish fruit.

Japanese Quince 'Rowallane'

Stachyurus praecox





Rose Gertrude Jekyll

An upright shrub rose to 1.2 m tall with open growth habit, broad grey-green foliage. Strongly fragrant, fully double, rich rose-pink flowers, open into a flat rosette shape, continuously flowering throughout the summer and autumn.





Burkwood Viburnum

Evergreen shrub to 3 m tall with dark green, shiny leaves. Globes of very fragrant white flowers to 10 cm across open from pink buds and are sometimes followed by small red fruit (turning black).

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Ailanthus altissima

Tree of heaven

INVASIVE!

Widely planted for ornament during the 19th and early 20th centuries and has since been recorded in the wild in some parts of England. This highly invasive tree affects the biodiversity of plants and invertebrates, including in protected areas. Its pollen can cause allergies and root systems can damage infrastructure.

Magnolia grandiflora

Large-flowered Magnolia

Magnificent evergreen tree to 10 m or more with large, very glossy, bright green leaves that are rusty brown on the underside. Bears huge, cup-shaped, fragrant white flowers. May be damaged by very cold weather.

Parrotia persica

Persian Ironwood

Spreading tree to 8 m tall bearing peeling bark and spidery, bright red flowers in winter and early spring. Produces fire coloured autumn foliage. Grow in acid soil for best autumn colour.

Sorbus thibetica 'John Mitchell'

Tibetan Whitebeam 'John Mitchell'

Deciduous tree to 20 m or so with very broad, round, silver-grey leaves with heads of white flowers in spring followed by yellowish fruit to 1.5 cm across.

Sorbus 'Joseph Rock'

Mountain Ash 'Joseph Rock'

Deciduous tree to 10 m bearing pinnate leaves that colour well in autumn. Spring white flowers are followed by round, pale yellow fruit to 1cm across.





















Acer palmatum

Japanese Maple

Small tree bearing graceful, lobed leaves that become scarlet in autumn. Many choice cultivars are available.

Acer palmatum var. *dissectum*

Cut-leaved Japanese Maple

Rounded shrub bearing deeply cut, sometimes purple, foliage that colours up well in autumn and is often accompanied by ornamental winged fruits. Protect from cold, drying winds.

Arbutus x andrachnoides **Hybrid Strawberry Tree** Tree to 8 m with peeling red bark and glossy, toothed evergreen leaves . The small flowers are white and appear in autumn. Alkaline soils may be tolerated but acid is preferred. Shelter from cold winds.



Pendula is a deciduous, slow-growing, weeping tree to 6 m tall with a dense, spreading crown. Leaves turn yellow and orange, with hop-like fruit clusters in the autumn.

Crataegus x lavallee

Lavalleei's Hawthorn

Spreading, semi-deciduous tree to 7 m bearing domed heads of white flowers followed by orange-red fruits to 2 cm across that persist through the winter.

Fagus sylvatica

Beech

Large, vigorous deciduous tree with a broad, spreading crown. Leaves broadly elliptic, yellow-green in spring, rich russet-brown in autumn. Small, green flowers and bristly fruits. Numerous cultivars are suitable for hedging and ornamental trees.

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Liquidambar styraciflua

Sweet Gum

Conical tree to 20 m with glossy leaves turning deep bronze, red and orange before falling in autumn. For best autumn colour plant in full sun. Can tolerate alkaline conditions where soils are deep.



Malus 'Golden Hornet'

Crab Apple 'Golden Hornet'

Deciduous tree to 8 m with a rounded habit. White flowers in spring are followed by copious, spherical, golden yellow fruit to 2 cm across which are carried over a long period.

Nyssa sylvatica

Tupelo

Broadly conical tree to 15 m. Leaves produce spectacular fiery shades in autumn. Shelter from cold winds and plant out when young.

Taxus baccata

Yew

Coniferous evergreen bearing thick, dark needles and, in female plants, red fruit which is eat eaten by birds. Eventually becoming large but easily pruned to size.







WASTER OF COMPANY







Ludwigia grandiflora

Water primrose

INVASIVE!

Originally introduced as an ornamental pond plant, but a number of wild populations have been recorded since 1998. Water primrose quickly covers water bodies restricting recreational use and harming native wildlife. If it were to establish widely in GB control costs could be millions of pounds annually. Help prevent future invasions by choosing one of the following plants.

Carex acuta

Slender tufted Sedge

A clump forming native sedge up to 90 cm, ideal for pond margins.

Carex elata 'Aurea'

Bowles's Golden Sedge

Rhizomatous, perennial sedge, to 70 cm, dying back in winter with leaves that bear a central, golden variegation and small flowers in spring and early summer to 45 cm.

Ceratophyllum demersum Rigid Hornwort Low light requirements make this a good choice

Low light requirements make this a good choice for aquaria. Perennial with stiff stems eventually growing to 1 m if left unchecked. Leaves dark green and forked into linear, toothed segments. Prefers quite nutrient rich water.

Chrysosplenium davidianum

David's Golden-saxifrage

Mat-forming perennial to 8 cm tall with hairy, rounded, dark green leaves and greenish yellow, cup-shaped flowers above leafy bracts. Ideal for shady rock crevices.

Eleocharis acicularis

Needle Spike-rush

Rhizomatous oxygenating perennial to 10 cm with rush-like leaves and flowers in spikelets to 5 mm (not produced when submerged). Provides good hiding places for fish fry. British native.

Eriophorum angustifolium

Common Cottongrass

A spreading, perennial member of the sedge family growing to about 40 cm and producing in summer spikes of cottonlike flowers. Survives in water to 5 cm deep.





Hosta 'Sum and Substance'

Plantain Lily 'Sum and Substance'

Large, ribbed, heart-shaped yellow or green leaves and spikes of bell-shaped lilac flowers in summer.

Hottonia palustris

Water-violet

Perennial oxygenator with whorled, pinnate leaves. Whorls of lilac, yellowthroated flowers to 2.5 cm across appear on upright stems above the surface of the water in spring. Grow in the muddy bottom of a pool in clear, shallow water in full sun.

Lysimachia nummularia 'Aurea'

Golden Creeping-Jenny

Vigorous prostrate perennial forming a mat of creeping stems with rounded, golden leaves in opposite pairs, bearing yellow, cup-shaped flowers in summer.









full sun or grow in partial shade where soil is likely to dry out in the summer.

Astilbe Fanal









Ragged-robin

Astilbe 'Fanal' (x arendsii)

An upright dainty perennial to 70 cm, with branched stems bearing terminal clusters of star-shaped rose-pink flowers in late spring and early summer. Well suited to moist meadows or wildlife gardens.

Herbaceous perennial with attractive leaves and erect plume-like panicles of tiny

white, pink or purple flowers in summer. Grow in moist, fertile, humus-rich soil in

Astilboides tabularis **Common Astilboides**

A strong statement perennial. Forming clumps of large, round leaves to 100cm across. Small, white flowers are borne on long stalks in summer. Can cope with wet but not waterlogged soils. Up to 1.5 m tall.



A herbaceous perennial forming a clump of erect stems up to 1 m clad in narrow, grey-green leaves, with small, starry white flowers in long, slender terminal racemes in early summer. In full or part shade, in soil that doesn't dry out in summer.



Lythrum salicaria

Purple Loosestrife

A strong clump-forming perennial with upright, branching, leafy stems to about 1 m. Produces loose spikes of pinky-purple star-shaped flowers in summer.

Nymphaea 'Pygmaea Helvola'

White Water-lily

Perennials with floating, rounded, variegated leaves to about 6 cm across. This miniature water lily with pale yellow flowers to 3 to 5 cm across is ideal for water tubs or small ponds.

Hosta (Tardiana Group) 'Halcyon'

Plantain lily 'Halcyon'

A compact herbaceous perennial with thick-textured, vivid blue-grey leaves to 20 cm in length. Light grevish-lavender, bell-shaped flowers are carried on stems to 40 cm tall. Prefers partial shade in moist soil. Best in slightly acidic or neutral soils.

Lobelia cardinalis 'Queen Victoria'

Lobelia 'Queen Victoria'

A short-lived herbaceous perennial to 90 cm tall, with beetroot-coloured, oblong leaves and bright scarlet, two-lipped flowers in long terminal racemes in summer. Requires reliably wet soil such as in a bog garden.

Alisma plantago-aquatica

Water-plantain

Perennial to 1 m tall bearing linear submerged leaves and rosettes of long-stalked. lance-shaped, greyish leaves above the water. Pale pink flowers produced on much-branched inflorescences in summer. Best in water 15 to 30 cm deep.

Butomus umbellatus

Flowering rush

Perennial to 1.5 m with rush-like, twisted leaves emerging purple and turning green. Umbels of fragrant pink flowers to 2.5 cm across are borne in late summer on tall stems. Grow in mud or water to 25 cm deep.















Iris pseudacorus

Yellow Flag Iris

Vigorous, rhizomatous perennial up to 1.5 m tall with lance-shaped, greyish leaves and bright yellow flowers with darker markings. For large ponds only.

Juncus articulatus

Jointed Rush

A clump forming British wild native marginal jointed rush with very attractive dark brown-black seed heads.

Submerged & oxygenating plants





Myriophyllum heterophyllum

Broadleaf watermilfoil

INVASIVE!

Broadleaf watermilfoil was introduced for use in aquaria and as an ornamental plant in outdoor ponds, but a small number of wild populations have since been recorded in recent years. This plant forms dense mats which clog water bodies harming wildlife and impacting on navigation and recreation. Help to prevent future invasions by choosing one of the following plants.

Callitriche stagnalis

Common Water-starwort

Perennial with narrow, opposite submerged leaves that become broader in the open air. The flowers are small and insignificant, borne in summer.

Caltha palustris

Marsh-marigold

Rhizomatous perennial bearing kidney-shaped leaves to 10cm long. Open, waxy, yellow or white flowers are carried on stems to 45cm in spring.

Canna 'Endeavour'

Water Canna 'Endeavour'

Tender, rhizomatous perennial to 1.8 m with erect, glaucous, paddle-shaped leaves and spikes of narrow-petalled red flowers to 5 cm across in summer and autumn. Lift tubers and overwinter in frost-free conditions.

Canna 'Erebus'

Water Canna 'Erebus'

Tender, rhizomatous perennial to 1.2 m with erect, dark green, paddleshaped leaves and spikes of exotic salmon flowers to 8cm across in summer and autumn. Lift tubers and overwinter in frost-free conditions.



*Cann<u>a</u> '*Ra'

Water Canna 'Ra'

Tender, rhizomatous perennial to 1.8 m with erect, slender, green leaves and spikes of exotic lemon-yellow flowers in summer and autumn. Lift tubers and overwinter in frost-free conditions.

Fontinalis antipyretica

Water Moss

Attractive evergreen slow growing moss with pretty leaves that can help hide aquaria pumps. Much liked by aquatic wildlife and provides an excellent site for spawning fish. Useful for improving water quality. Thrives in sun and shade, prefers moving water and cooler conditions.







Submerged &

oxygenating plants

Floating pla



Hydrocotyle ranunculoides

Floating pennywort

INVASIVE!

Introduced as an ornamental pond plant, but has since spread into the wild and become widely established in parts of the UK. Floating pennywort can grow up to 20 cm a day under the right conditions, quickly covering whole waterbodies where it replaces native plants, interferes with recreational activities and can increase the flood risk. Help to prevent future invasions by choosing one of the following plants.

Hydrocharis morsus-ranae

Frogbit

Stoloniferous perennial spreading on the surface of water and producing rounded, glossy leaves to 3 cm long. White, bowl-shaped flowers, 2 cm across, yellow at the centre are borne in the summer. Less vigorous in deeper water.

Mentha aquatica



 Water Mint

 Rhizomatous perennial to 90 cm with purple stems and narrow highly aromatic leaves. In summer dense spheres of tubular lilac flowers are produced. Grows in water to 15 cm deep. Plant in baskets to contain spread.

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Menyanthes trifoliata

Bogbean

Rhizomatous perennial forming floating mats of three-parted leaves with leaflets to 6 cm long. Erect inflorescences of white, star-shaped flowers are sometimes produced in summer. Will need regular trimming, for large ponds only.

Myosotis scorpioides

Water Forget-me-not

Creeping, rhizomatous perennial with leaves to 10 cm and, in summer, a profusion of bright blue, very open flowers to 8 mm across with a paler eye. Grows best in water to 10 cm deep.

Myriophyllum spicatum

Spiked Water-milfoil

Perennial with whorls of deeply divided leaves on stems which grow to 1 m or more. In summer small reddish flowers are carried just above the water. Stems may not die back in every winter, and so may provide year-round cover for fish.

Myriophyllum verticillatum

Whorled Water-milfoil

UK native perennial oxygenator with whorls of deeply divided leaves and linear leaflets borne on stems to 1m or more. In summer very small yellowish flowers are carried just above the surface of the water.



Nuphar lutea

Yellow Water-lily

Perennial bearing floating, rounded, thick-textured, hairless leaves to 40 cm long. Above these in the summer are carried almost spherical yellow flowers to 6 cm across singly on stems. For large ponds only.

Potamogeton crispus

Curled Pondweed

Perennial oxygenator bearing submerged, dissected, almost translucent leaves and leathery, floating leaves with very undulating margins. The flowers are very small and whitish, carried just above the water.

Ranunculus aquatilis

Common Water-crowfoot

Pretty annual/short-lived perennial with submerged stems and finely divided leaves, and floating lobed, kidney-shaped leaves. Produces white flowers (2 cm) at the water's surface in summer. Prefers shallow water with good nutrient levels.









Sagittaria sagittifolia

Old World Arrowhead

Spreading perennial bearing arrow-shaped leaves with long lobes at the base and 1m tall inflorescences carrying white flowers to 2.5 cm across. In deep water long, floating leaves may also be produced. For large ponds only.



Thalia dealbata

Powdery Alligator-flag

Perennial to 2.5 m bearing lanceolate grey-green leaves on long stalks. Striking, violet flowers are borne in slender spikes in summer. Not fully hardy and may be deciduous in cold weather



Veronica be	ccabunga
Veronica be	ccabunga

Brooklime

Creeping perennial bearing fleshy stems and leaves which are rounded and can be entire or toothed. Racemes of blue flowers with a white eye are produced in spring and summer. Will tolerate shallow water only.



Make sure nothing you remove from your garden or pond gets into the wild, you could be breaking the law if it does. Find more gardening tips on page 6.

Table of characteristics

Characteristic		Tolerant of shade / low light levels	Needs sun	Needs alkaline conditions	Neutral conditions	Needs acidic conditions	Needs drier soils	Moist but well drained soils	Needs wetter soils	Needs sheltered position	Attractive flowers	Attractive foliage	Fine autumn colours	Bears ornamental fruit	Structural feature or screening / hedging	Windbreak	Berries for birds	RHS Plants for Pollinators	Provides shelter/cover for wildlife	Submerged aquatic plant	Floating aquatic plant	Marginal/emergent aquatic plant	Bog garden plant	UK Native plant
Plant	Page	0	0				V	4	0	0	Ø	0	0	٨	0	÷	0	٨	Ð	J	ூ	۷	9	UR)
Abelia x grandiflora	32		V	V		V	V					V	V						V					
Acer palmatum	38	V	V		V	V		V		V		V	V		V									
Acer palmatum var. dissectum	38	V	V		V	V		V		V		V	V		V									
Achillea millefolium	08		V	V	V	V		V			V	V						V						~
Actinidia kolomikta	26		V	V	V	V		V		V		V	V	V					V					
Aethionema 'Warley Rose'	20		V	V	V	V		V			V	V												
Ajuga reptans	14	V	V	V	V	V		V	V		V	V						V	V					~
Alisma plantago-aquatica	43		V	V	V	V			V		V	V						V				V		~
Allium atropurpureum	22		V	V	V	V	V	V		V	V				V			V						
Ampelodesmos mauritanicus	23		V				V	V				V	V		V				V					
Angelica gigas	09	V							V	V	V				V				V					
Anthriscus sylvestris 'Ravenswing'	25		V					V			V	V						V						
Aralia cachemirica	24	V						V				V	V	V	V									
Arbutus x andrachnoides	38		V					V		V	V		V	V		V	V							
Asarum splendens	13	V			V	V		V			V	V												
Asphodeline lutea	17		V				V				V													
Astelia chathamica	23	V						V		V		V			V									
Aster linosyris	18		V	V			V				V													v
Astilbe 'Fanal' (x arendsii)	42	V						V	V		V	V							V					
Astilboides tabularis	42	V							V			V			V				V					
Athyrium filix-femina	25	V			V	V		V		V		V			V				V					v
Baptisia australis	08		V		V	V		V			V								V					
Bergenia cordifolia & hybrids	14	V						V			V	V			V			V						
Butomus umbellatus	43		V						V		V							V				V	v	v
Buxus sempervirens	30	V						V							V	V		V	V					~
Callitriche stagnalis	44	V								V									V	V	V			v
Calluna vulgaris	13		V			V		V			V		V					V	V					v
Caltha palustris	45		V						V		V							V	V			V	V	•
Camassia quamash	20		V					V		V	V													
Camellia japonica cultivars	33	V			V	V				V	V	V							V					
Campanula rotundifolia	18		V					V			V													~
Canna Endeavour'	45		V						V	V	V	V	V		V								V	

Table of characteristics

Characteristic		Tolerant of shade / low light levels	Needs sun	Needs alkaline conditions	Neutral conditions	Needs acidic conditions	Needs drier soils	Moist but well drained soils	Needs wetter soils	Needs sheltered position	Attractive flowers	Attractive foliage	Fine autumn colours	Bears ornamental fruit	Structural feature or screening / hedging	Windbreak	Berries for birds	RHS Plants for Pollinators	Provides shelter/cover for wildlife	Submerged aquatic plant	Floating aquatic plant	Marginal/emergent aquatic plant	Bog garden plant	UK Native plant
Plant	Page	0	0		*		Ø		0	0	Ø	0	0	8	0	Ð	0	٨	Ð	3	33		Ð	UK)
Canna 'Erebus'	45		V						V	V	V	V	V		V								v	
Canna 'Ra'	45		V						V	V	V	V	V		V								~	
Carex acuta	40																							V
<i>Carex elata</i> 'Aurea'	40	V							V				V		V				V				~	
Carex flagellifera	22		V					V				V	V		V	V			V					
Carpinus betulus 'Pendula'	38		V					V				V	V		V	V	V		V					
Ceanothus arboreus 'Trewithen Blue'	26		V	V	V			V		V		V			V			V	V					
Ceanothus thyrsiflorus	10		V	V	V			V		V					V				V					
Ceratophyllum demersum	40	V																	V	V	V			V
Chaenomeles x superba 'Rowallane'	36		V					V		V	V		V	V		V	V	V						
Chimonanthus praecox	11		V					V		V	V			V			V		V					
Chimonanthus praecox 'Luteus'	33		V					V		V	V			V			V		V					
Choisya x dewitteana 'White Dazzler'	30		V					V		V	V	V			V	V			V					
Chrysosplenium davidianum	40	V			V				V			V							V				V	
Cirsium heterophyllum	24		V				V	V			V	V												V
<i>Clematis</i> 'Étoile Violette'	26		V	V	V			V			V	V			V				V					
Clematis x durandii	27	V		V	V			V			V				V				V					
Clematis macropetala	27		V	V	V			V			V	V	V		V				V					
Colchicum autumnale	17		V					V		V	V		V					V						V
Colchicum speciosum	20		V					V		V	V		V					V						
Convallaria majalis	14	V						V	V	V	V	V					V		V					V
Crambe cordifolia	24		V				V			V		V			V			V						
Crambe maritima	13		V				V			V		V			V			V						•
Crataegus laevigata 'Paul's Scarlet'	12	V					V	V			V	V			V	V	V		V					
Crataegus x lavallee	38	V					V	V			V	V			V	V	V		V					
Crocus banaticus	21		V				V	V			V							V						
Crocus biflorus	21		V				V	V			V							V						
Crocus etruscus	21		V				V	V			V							V						
Crocus laevigatus	21		V				V	V			V							V						
Datisca cannabina	24	V						V		V		V			V				V					
Deschampsia 'Goldtau'	22		V		V	V	V	V						V	V				V					
Dierama pulcherrimum	21		V				V	V		V	V													

Table of characteristics

Characteristic		Tolerant of shade / low light levels	Needs sun	Needs alkaline conditions	Neutral conditions	Needs acidic conditions	Needs drier soils	Moist but well drained soils	Needs wetter soils	Needs sheltered position	Attractive flowers	Attractive foliage	Fine autumn colours	Bears ornamental fruit	Structural feature or screening / hedging	Windbreak	Berries for birds	RHS Plants for Pollinators	Provides shelter/cover for wildlife	Submerged aquatic plant	Floating aquatic plant	Marginal/emergent aquatic plant	Bog garden plant	UK Native plant
Plant	Page	0	0	•	•		Ø	•	0	Θ	0	0	0	٨	0	÷	0	٨	Ð	J	33		9	UK
Digitalis purpurea	09	~					V	V			V	V						V	V					V
Echium vulgare	19		V				V				V	V			V			V						~
Eleocharis acicularis	41		V																V	V			~	V
Enkianthus campanulatus	33				V	V	V	V			V		V		V	~		V	V					
Epimedium x perralchicum	13				V	V		V		V	V	V							V					
Erica x darleyensis	11		V					V			V							V	V					V
Eriophorum angustifolium	41		V			V			V			V							V			V	~	
Eucomis pallidiflora subsp. pole-evansii	22		V				V			V	V	V			V									
Eupatorium cannabinum	12		V					V	V		V	V	V		V			V	V					V
Eupatorium maculatum Atropurpureum Group	19							V	V		V				V			V						
Fagus sylvatica	39		V					V				~	~		V	V			V					~
Fontinalis antipyretica	45	~																		V	V			
Fothergilla x intermedia	33	~				V		V			V	V	V		V									
Frankenia laevis	15		V	r			r	V			V								V					~
<i>Fuchsia</i> 'Genii'	33		V					V		V	V	V	V					V						
Galium odoratum	08	~						V			V	V			V			V	V					~
Galtonia candicans	18		V				V	V			V	~												
Garrya elliptica	30	~						V				V			V	~			V					
Genista pilosa	16			V	V		V	V			V	~			V				V					~
Geranium 'Mavis Simpson'	16	~					V	V			V	V						V	V					
Geranium pratense	16		V					V			V	~							V					~
Geranium sanguineum var. striatum	16	~					V	V			~	V			V			~	~					
Geranium sylvaticum	19	~						V			V	V						V	V					~
Geum rivale	18							~	V		V							V					~	~
Gillenia trifoliata	19	~			V	V				V	V													
Hamamelis vernalis	10				V	V		V		V	V	V	V		V				V					
Hamamelis x intermedia	30				V	V		V		V	V	V	V		V				V					
Hebe rakaiensis	34	~		V	V		V	V				~			V	V		V	V					
Hebe topiaria	31	~		V	V		V	V				~			V	V		V	~					
Hedera algeriensis 'Gloire de Marengo'	27	~					V	V				~		V	~	~	V		V					
Hedera helix	27	~					V	~				~		~	~	~	~	~	V					~
Heliotropium arborescens	11		V					V		V	V	V						V	V					

Table of characteristics

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Plant	Page	0	0			P	V		0	0	0	0	0	٢	0	Ð	0	٨	Ð	3	32		Ð	Uß
Helleborus foetidus	09	V		v	V			V		V	V	V	V		V			V	V					V
Hosta Sum and Substance'	41	V			V	V			V	V		V											V	
Hosta (Tardiana Group) 'Halcyon'	43	V			V	V		V	V			V			V				V					
Hottonia palustris	41		V																V	V				V
Hydrangea arborescens 'Annabelle'	34	V			V	V		V	V		V		V		V				V					
Hydrangea macrophylla	34	V			V	V		V	V		V		V		V				V					
Hydrangea paniculata	34	V			V	V		V	V		V		V		V			V	V					
Hydrangea petiolaris	27	V			V	V		V	V	V	V	V	V		V			V	V					
Hydrangea serrata	31		V		V	V		V	V		V		V		V				V					
Hydrocharis morsus-ranae	46		V								V	V							V		V			V
Hylotelephium spectabile	09		V	V	V		V	V			V	V	V						V					
Hyssopus officinalis	11		V	V	V		V	V			V							V	V					
Iberis saxatilis	20		V				V	V										V	V					
Ilex aquifolium	31	V						V				V	V	V	V	V	V		V					V
<i>Ilex aquifolium</i> 'J. C. van Tol'	31	V						V				V	V	V	V	V	V	V	V					
Indigofera heterantha	28		V					V			V	V	V		V				V					
Iris 'Black Swan'	25		V		V	V	V				V				V									
Iris pseudacorus	44	V				V			V		V							V				V	~	V
Juncus articulatus	44								V						V				V			V	V	V
Kniphofia rooperi	18		V		V	V	V	V			V		V		V									
Leucothoe fontanesiana	14	V				V			V			V			V	V		V	V					
Ligularia 'Gregynog Gold'	20		V							V	V		V											
Ligustrum vulgare	31	V					V	V				V			V	V	V		V					V
Liquidambar styraciflua	39	V					V	V				V	V		V	V			V					
Lobelia cardinalis 'Queen Victoria'	43		V						V	V	V	V	V										~	
Lonicera periclymenum 'Graham Thomas'	28	V						V			V			V	V		V	V	V					
Lychnis flos-cuculi	42	V						V	V		V							V	V					~
Lysimachia ephemerum	42	V						V	V		V				V			V	V			V		
Lysimachia nummularia 'Aurea'	41	V						V	V		V	V						V	V				V	
Lythrum salicaria	42		V						V		V				V			V	V				V	
Magnolia grandiflora	37	~								V	V	V			~				~					
Magnolia stellata	34	V								V	V	V			V			V	V					

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Plant	Page	0	0	PH1	•		V	4	0	Θ	Ø	0	0	٨	0	÷	0	٨	Ð	J	9		9	W
Magnolia x soulangeana	35	V								V	V	~			~				~					
Malus 'Golden Hornet'	39		V					V			V		~	~	~	~	~	~	~					
Matthiola longipetala subsp. Bicornis	09		V	~	~					~	V							V						
Melica uniflora f. albida	23	~		~	~		V	V				~							~					
Mentha aquatica	46	V									~								~			~	~	~
Menyanthes trifoliata	46		V		~	~													~	~			~	~
Milium effusum 'aureum'	23	V						V	V			~	~		~									
Myosotis scorpioides	46		V						~		V							~	~			~	~	~
Myriophyllum spicatum	47		V									~							~		~			~
Myriophyllum verticillatum	47	~																	~		~			~
Myrtus communis	29		V							V			V	~	~		~		V					
Nicotiana sylvestris	23		V					V		V	~	~												
Nuphar lutea	47		V								V	V							V	V				~
Nymphaea 'Pygmaea Helvola'	43		V								V	V							~	~				
Nyssa sylvatica	39		V		~	V	V	V		V		V	V		V									
Orlaya grandiflora	10		V					V			V	V							~					
Osmanthus x burkwoodii	31	V						V						~	V	V	V		V					
Pachysandra terminalis	14	~					V	V			V	V				V								
Parrotia persica	37	V					V	V			~	V	~		V	V			V					
Penstemon newberryi	35		V				V	r			~	V			~			~	V					
Photinia x fraseri	32	V					V	V				V	V		V	V			V					
Pieris japonica	32		V		~	V	V	V		V	V							V						
Pileostegia viburnoides	29	V					V	V			~	V	~		V				V					
Polemonium caeruleum	19	V						V			V	V						V	V					~
Potamogeton crispus	47	V																	V	V				~
Ranunculus aquatilis	47		V								V	V						V	V		V		V	~
Rheum palmatum	24	V			V	V			V		V	V			~									
Ribes x beatonii	35		~					V		V	V	V							V					
Rosa 'New Dawn'	28	V					V	V			V		V		~				V					
Rosa 'Gertrude Jekyll'	36		~				V	V			V	V	V		V				V					
Sagittaria sagittifolia	48		~								V	V			V				~		V	~		~
Sambucus nigra f. porphyrophylla 'Gerda'	11	V						V			V	V	V	V	V	V	V		V					

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Plant	Page	0	0				Ø	2	0	0	0	0	0	٨	0	æ	0	٨	Ð	3	99		9	Uß
Sanguisorba officinalis	10	~						V			V	V						V	V					•
Sanicula epipactis	15				V	V		V		V	V	V												
Sarcococca hookeriana	36	~						V			V	V		V	V	V	V	V	V					
Silene uniflora 'Robin Whitebreast'	16		V					V			V													
Skimmia japonica 'Nymans'	35	V						V			V		V		V	V	V	V						
Sorbus Joseph Rock	37	V			V	V	V	V				V	V	V	V	V	V							
Sorbus thibetica John Mitchell'	37	V			V	V	V	V			V	V	V	V	V	V	V		V					
Stachyurus praecox	36	V			V	V		V			V	V			V			V						
Stauntonia hexaphylla	26	V								V	V	V		V			V							
Taxus baccata	39	V					V	V			V	V	V	V	V	V	V	V	V					V
Thalia dealbata	48		V						V	V		V							V			V		
Thalictrum rochebruneanum	25	V						V	V		V	V			V				V					
Tiarella cordifolia	15	V						V		V	V	V	V						V					
Valeriana officinalis	10	V									V							V	V					V
Veronica beccabunga	48		V						V		V							V	V		V	V	V	V
Veronica perfoliata	17		V				V	V			V	V	V											
Veronicastrum virginicum	08	V						V			V				V			V	V					
Viburnum betulifolium	32	V					V	V			V	V	V	V	V	V	V		V					
Viburnum opulus	12	~					V	~			V	V	V	V	V	V	V	V	V					1
Viburnum x bodnantense	12		V					V			V		V		V	V			V					
Viburnum x burkwoodii	36	V					V	V			V	V			V	V			V					
Viola odorata	15	V						V			V	V							V					•
Vitis coignetiae	28	V		V	V		V	V		V		V	V		V		V							
Waldsteinia ternata	15	V						V	V	V	V				V									
Wisteria floribunda cultivars	29	V						V		V	V	V		V	V		V							
Zabelia triflora	35		V				V	V		V	V								V					
Zanthoxylum piperitum	32		V				V	V			V	V	V	V	V	V	V		V					

About the list

This list is based on a previous list developed by the RHS and Plantlife, published in 2010, and was updated in 2021 by the Plant Alert Team at Coventry University.

The list includes only ornamental plants where evidence is available providing some assurance that future invasions from these species are less likely. Coventry University have checked that these plants have not been frequently found outside gardens, or have been recorded as invasive in other countries. The list does not include any species identified in scientific horizon scanning activities designed to identify potential future invasive species. Furthermore, recently introduced ornamental plants or plants not widely available in the trade were not included as there is not enough evidence to assess their potential to escape from cultivation. Both species which have remained on the list, and any species replacing excluded species from the previous list, have been selected according to these criteria.

Other titles in this series

Landscaping without harmful invasive plants Keeping a pond or aquarium without harmful invasive plants

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For more information about non-native species visit nonnativespecies.org





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