



Top 50 Meadowland Plants for Pollinators

A selection of our best native wildflowers, arable meadow flowers and North American Prairie flowers to plant for Pollinators

List Curated by Thomas McBride

From research data collected and collated at the
National Botanic Garden of Wales

NB: Butterflies and Moths are not studied at the NBGW so any data on nectar plants beneficial for them is taken from Butterfly Conservation





Meadowlands



Meadowlands are typified by swathes of open countryside predominantly full of grass species. While grass species are very important to these habitats, it is the wildflower species that thrive amongst the grasses that are of particular importance to pollinating insects and, thereby, included on this list. The list is split into five sections. The first four are different types of native grassland found in the UK. Plants from these categories may be planted alone in a garden, or altogether to create a more natural habitat. The final, largest, category is North American prairie plants which are not native but will add an excellent pop of colour to any garden as well as attracting pollinating insects.



Planting grasses is important in the creation of some of the native wildflower habitats. Planting ornamental grasses may enhance prairie-style borders and may lead to a more natural appearance. However, in a garden context, adding grasses is not essential and it is not advised to plant lots of native grasses in a horticultural border as they will often spread beyond control. Make sure to do research before selecting grasses to plant.

Guide to using these pages:

Map

Maps depict the native area of the plant (in green)
They also show areas the plant is naturalised (in purple)

All maps shown are derived from 'Plants of the World Online'; courtesy of Kew Gardens

Flowering Period (this is when it is good for pollinators!)

Plant Family

Growing habit and mature size of the plant

Latin Binomial Name

Rhinanthus minor

Common English Name

Yellow Rattle



Photograph of the plant in flower



Insect groups known to favour the nectar of this plant

None

Late Spring - Midsummer

Orobanchaceae
Broomrape Family

2ft Perennial



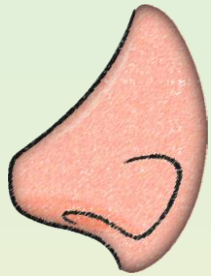
C4

Useful knowledge or warnings about the plant

RHS AGM cultivars of this species (or a related species occasionally)

Key to these Pages

Additional information on these garden plants



The flowers and/or leaves have a Pleasant scent

This plant would only be suitable for meadow-style planting



Plant is often used in traditional Herbal Remedies



The plant has edible parts that are commonly eaten or used in cooking



Warnings



Plant tissue is highly toxic if ingested



Sap may cause irritation (Wash hands after touching or avoid touching)

Temperature

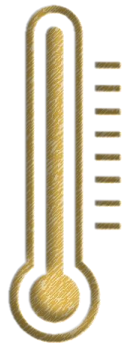
Some of the plants listed in our Top 200 are not fully hardy in all or some parts of the United Kingdom.

Plants without a thermometer symbol are fully hardy in the severest UK Winter; equating to **H5** or hardier.

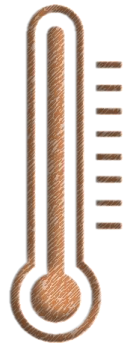
Plants with a coloured thermometer symbol are hardy to varying degrees as follows:



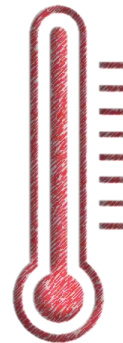
Almost Hardy
(H4)



Half-Hardy
(H3)



Not Frost Hardy
(H2)



Not Hardy
(H1)

RHS Hardiness Scale

H1a	-	Above 15°C
H1b	-	Minimum 10°C
H1c	-	Minimum 5°C
H2	-	Minimum 1°C
H3	-	Minimum -5°C
H4	-	Minimum -10°C
H5	-	Minimum -15°C

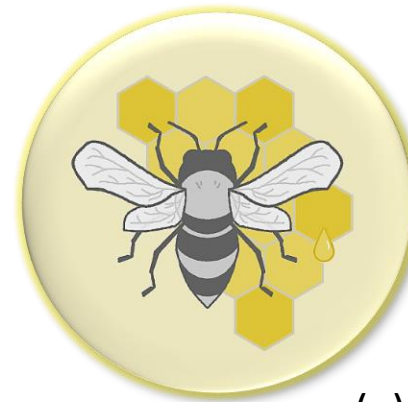
Pollinators

Our data on pollinators has been collected from studies spanning over a decade. Pollinator symbols appear when plants are proven to be good nectar plants for certain insects.

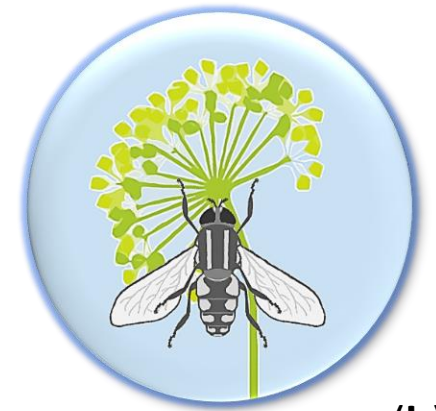
It should be noted that all bee and hoverfly data is ours but lepidoptera data is taken from Butterfly Conservation.

Our data spans a wide range of different insect species. For simplicity, these species have been condensed into six easy icons to represent them:

- | | | |
|---------------|------------------------------------|------------------|
| a) Honeybees | c) Bumblebees | e) Moths |
| b) Hoverflies | d) Butterflies
(Includes Moths) | f) Solitary Bees |



(a)



(b)



(c)



(d)



(e)



(f)



Arable Meadow Wildflowers



Since arable land is traditionally left fallow as part of a natural crop rotation process, the soil is left bare after having been churned up which allows for buried seeds to germinate. Traditional corn meadows, therefore, have a very specific group of species that thrive in fallow years and, indeed, may also pop up unexpectedly amongst crops or on the periphery of arable land. These species are usually annuals as they are ruderal species; hoping to set the maximum amount of seed after just one year of growth; often all the time available to them before the crop rotation means the meadow becomes a cornfield again.



Wildflower mixes popularly include species traditionally found in arable land or wasteground as they are mostly easy-to-sow annuals and will germinate quickly. Perennials in the daisy family, such as ragwort or oxeye daisy are also common as they will leave a dormant root tip in the ground when dug up which may grow again several years later.

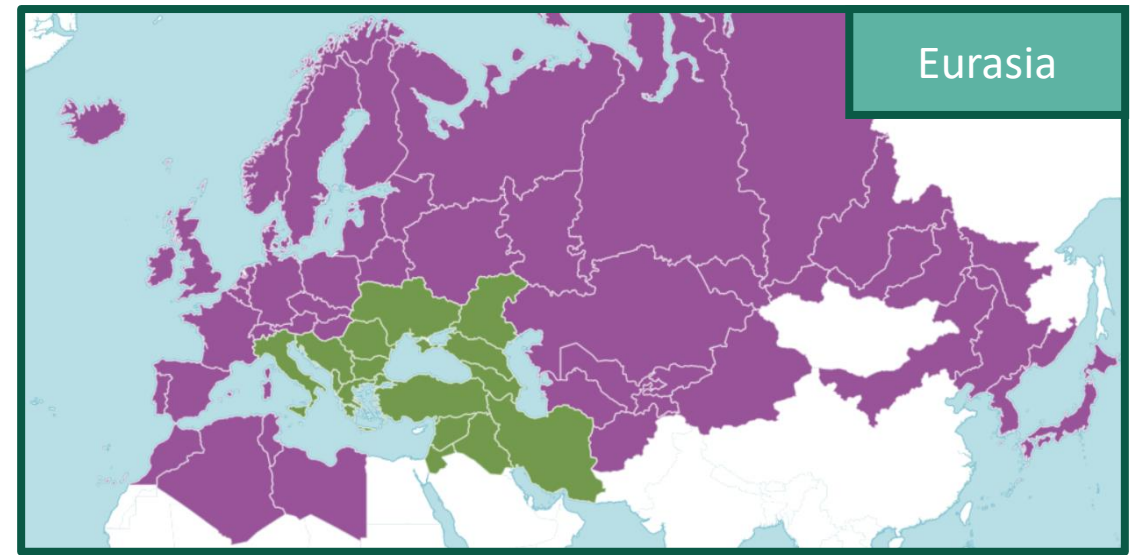
Traditional arable wildflowers are best planted in an open, sunny part of the garden that has been freshly dug; not a garden border. Planting grasses between is optional.

Agrostemma githago

Common Corn-cockle



Photograph from Flickr (CC) Emorsgate Seeds



Eurasia

None

Summer ☀

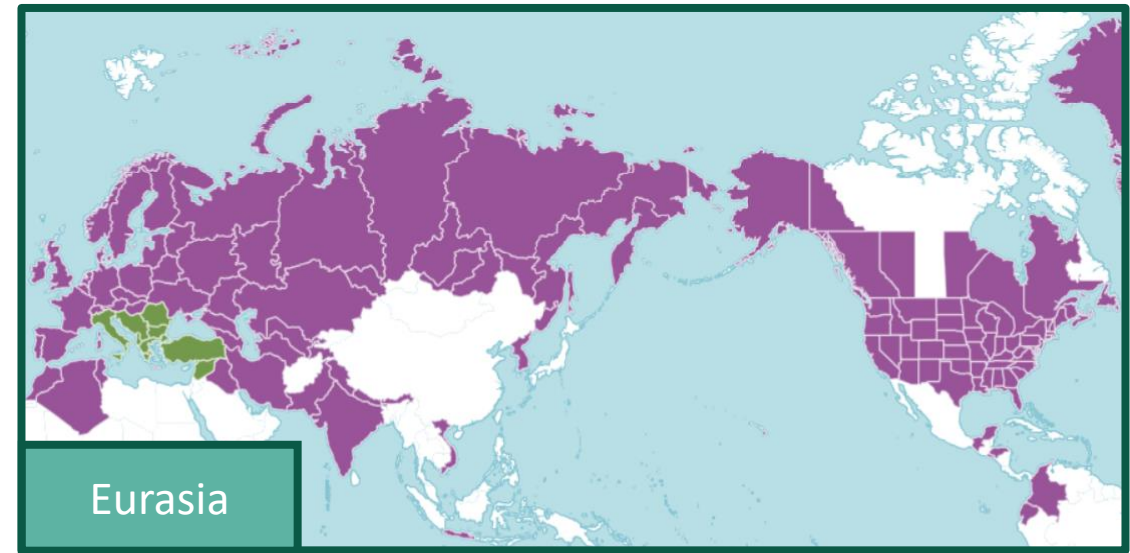
Caryophyllaceae
Pink Family

3ft Annual



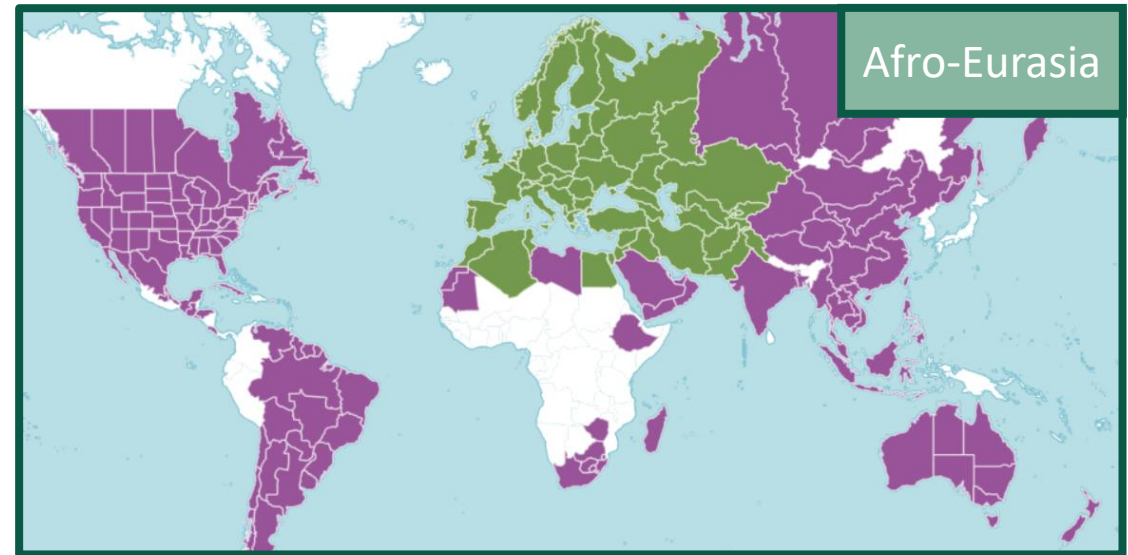
Centaurea cyanus

Annual Cornflower



Cichorium intybus

Chicory



Photograph from Flickr (CC) Dan Mullen



None



Echium vulgare

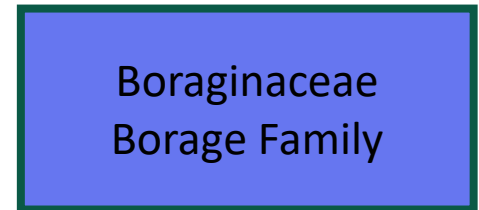
Viper's Bugloss



Photograph from Flickr (CC) S. Rae

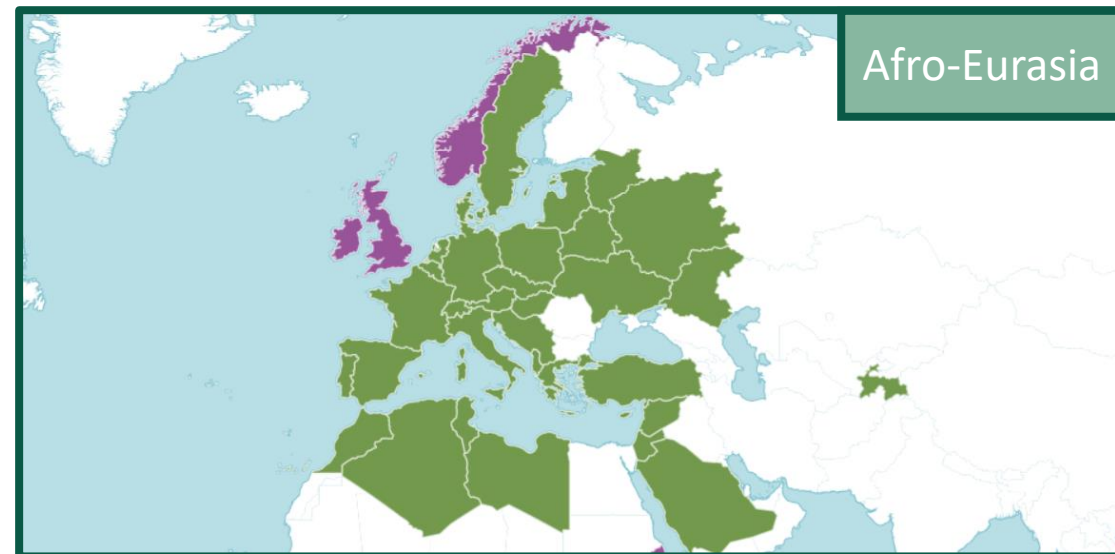


'Blue Bedder'



Glebionis segetum

Corn Marigold



Jacobaea vulgaris

Ragwort



Photograph from Flickr (CC) Colin



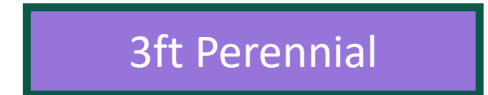
None



Summer ☀



Asteraceae
Daisy Family



3ft Perennial

Leucanthemum vulgare

Oxeye Daisy, Marguerite



Photograph from Flickr (CC) Antoinette Janssen



None

Late Spring
- Early Summer

Asteraceae
Daisy Family

3ft Perennial

Papaver rhoeas

Field Poppy



Related Species: *Papaver commutatum*

'Ladybird'



Summer ☀

Papaveraceae
Poppy Family

2ft Annual



Chalk Meadow Wildflowers



Chalk grassland naturally covers a significant proportion of the English Lowlands. Unlike arable grassland, the species are all truly wild and many are very attractive to a wide variety of pollinating insects. The plants in this section will thrive in chalky grassland but will also do well in any mid-length, well-drained grassland that is neutral to alkaline.

If you have a large wild area in your garden that is relatively dry and sunny, this group of flowers will thrive. These flowers will also do well in garden borders. Unlike some meadow species, these are largely perennials so can be planted amongst a more traditional garden border.



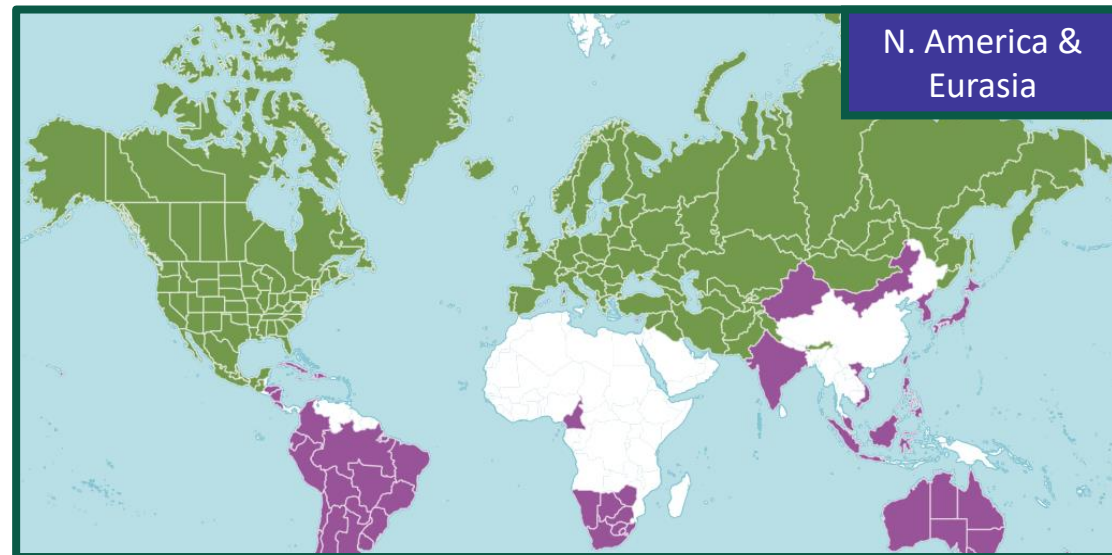
Chalk grasslands are often home to a large number of butterflies. Species such as scabious, knapweed and salvia are perfect in creating a habitat where browns, whites and other butterflies will thrive due to the high nectar flow.

Remember, wildflowers do not like nutrient-rich soil so, as long as the soil is dug through and is well draining, the plants on this list will thrive and should attract a lot of wildlife. Planting native grasses with these wildflowers is essential.



Achillea millefolium

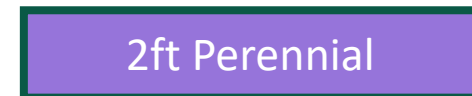
Common Yarrow



Photograph from Flickr CC) Andrea Pokrzywinski



'Red Velvet'
'Lansdorferglut'



Campanula rotundifolia

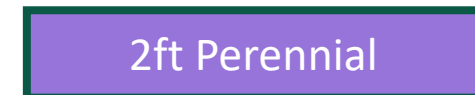
Common Harebell



Photograph from Flickr (CC) Andreas Rockstein

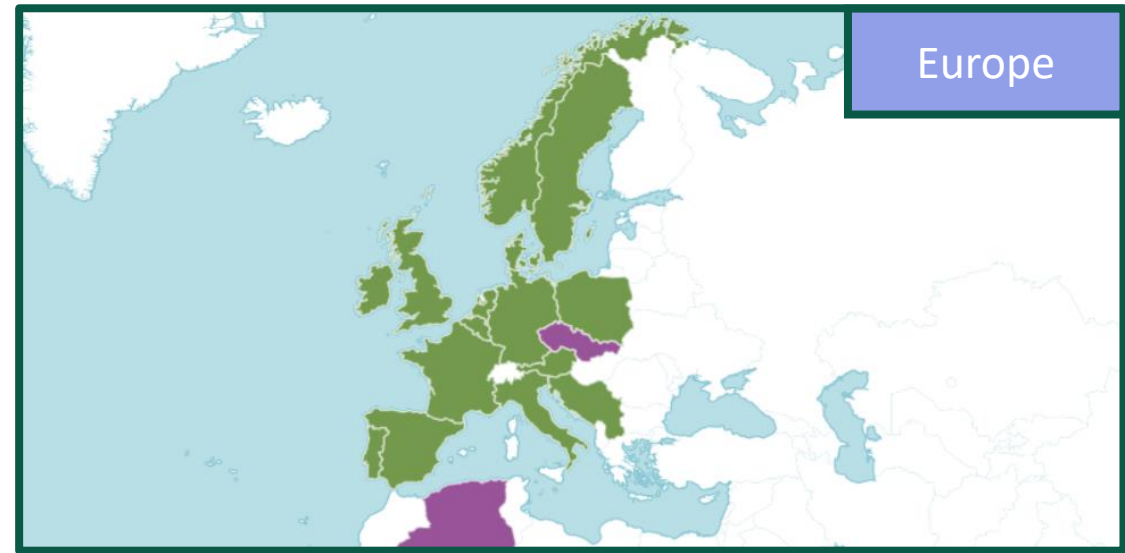


None

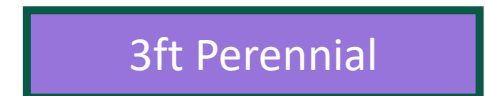


Centaurea nigra

Common Knapweed



Photograph © Thomas McBride



Daucus carota

Wild Carrot



Photograph © Thomas McBride

Various cultivars of
Ssp. sativus
(Domesticated Carrots)

The logo for the RHS Award of Garden Merit, featuring a green trophy cup inside a circular border with the text "RHS AWARD OF GARDEN MERIT" and a registered trademark symbol. To the right is a stylized tree icon.

Summer ☀

Apiaceae
Carrot Family

3ft Perennial

Galium verum

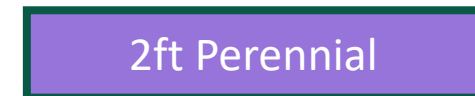
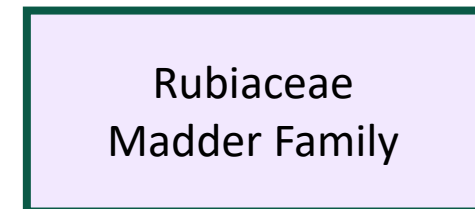
Lady's Bedstraw



Photograph © Thomas McBride



None



Geranium pratense

Meadow Cranesbill



'Mrs Kendall Clark'
'Plenum Violaceum'*

The logo for the RHS Award of Garden Merit, featuring a green trophy cup inside a circular border with the text "RHS AWARD OF GARDEN MERIT" and a registered trademark symbol. To the right of the logo is a stylized white tree icon.

Summer ☀

Geraniaceae
Cranesbill Family

2ft Perennial

* Double flowered cultivars are not good for most pollinating insects so try to buy single flowers when possible

Knautia arvensis

Field Scabious



Eurasia



Photograph © Thomas McBride



None

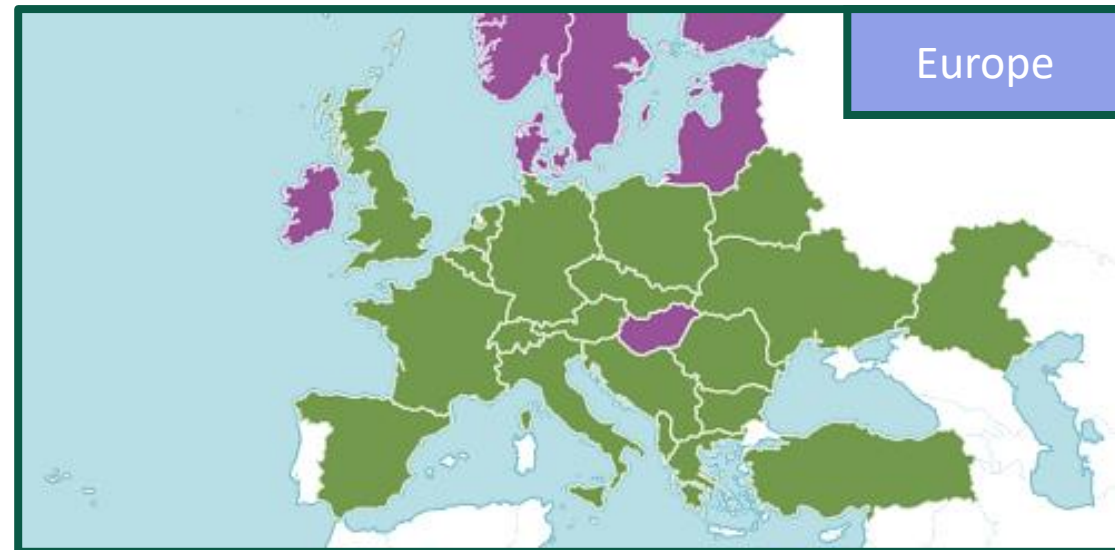
Midsummer
- Early Autumn

Caprifoliaceae
Honeysuckle Family

4ft Perennial

Malva moschata

Musk Mallow



Photograph from Flickr by Harald Henkel



Midsummer
- Early Autumn

Malvaceae
Mallow Family

2ft Perennial

Primula veris

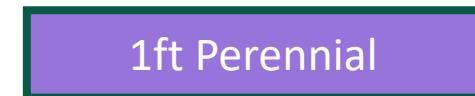
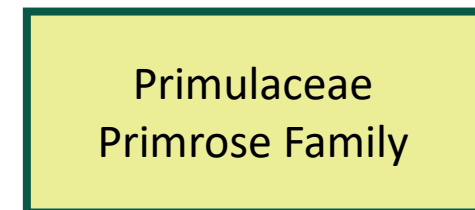
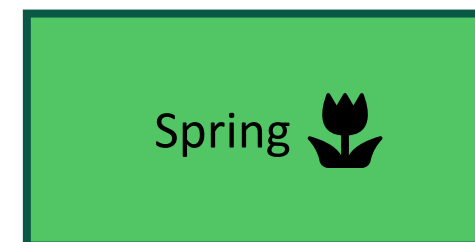
Common Cowslip



Photograph © Thomas McBride



- Species -



Salvia pratensis

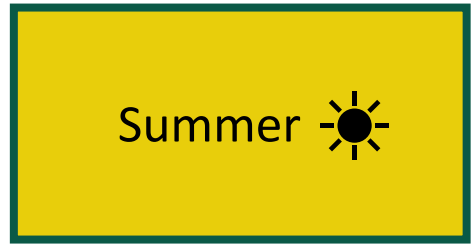
Meadow Clary



Photograph from Flickr (CC) Charlie Jackson



'Haemotodes'
'Indigo'



Short-grass Meadow Wildflowers

Short-grass meadows are quite a unique eco-system that are often home to rare species of plants such as orchids. However, planting a short-grass meadow is not for the faint-hearted! Of all the plant sets in this meadowland flowers list, these flowers need the widest space as they will spread. There are many more species not included such as buttercups which will naturally populate this habitat once it has become established.

To plant a short-grass meadow, the best way is to lay green hay (freshly-cut hay) from an existing short-grass meadow on a patch of existing grass such as a former paddock or playing field. The key to a successful short-grass meadow is two-fold. Firstly, a lack of fertiliser is essential; the ground should not have been fertilised in the past 5 years in order that there are plenty of mycorrhizal fungi in the soil. Here at the Botanic Garden, we have two short-grass meadows - Cae Trawscoed and Cae Tegerianii (Pictured). Secondly, it is important that the green hay, or a planted seed mix, contains species from the Orobanchaceae family; particularly yellow rattle and eyebright. These species are hemiparasitic, which means they take nutrients from the grasses of the field causing them to have stunted growth. Through this, the grass will naturally grow shorter without grazing, allowing for species such as clover, cat's-ear and even wild orchids to thrive. Patience is key when planting a short-grass meadow as it can take a while for the hemiparasitic plants to have an effect but, once they do, the result is very rewarding and will continue to flourish as a sustainable eco-system into the future. Here at the garden we are constantly seeing new species popping up. At the wetter end of the meadow there are different species too... {D}



Euphrasia nemorosa

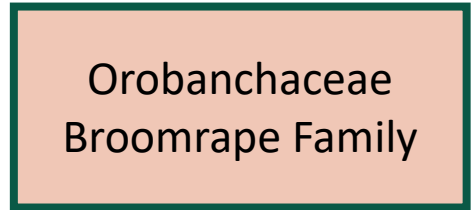
Common Eyebright



Photograph © Thomas McBride



None



Hypochaeris radicata

Cat's-ear



Afro-Eurasia



Photograph from Flickr (CC) Andreas Rockstein

None



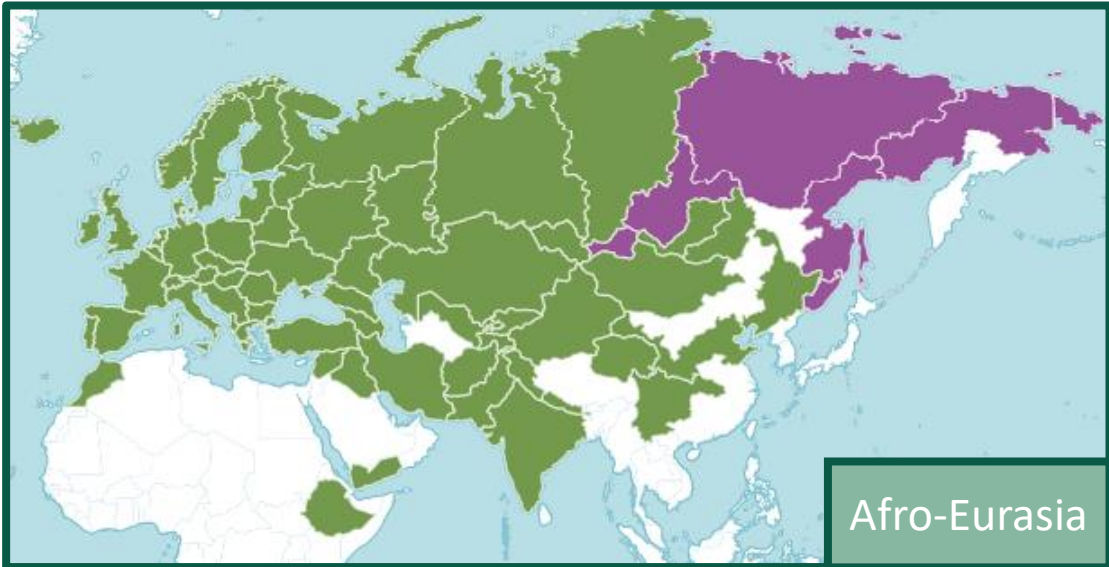
Late Spring
- Midsummer

Asteraceae
Daisy Family

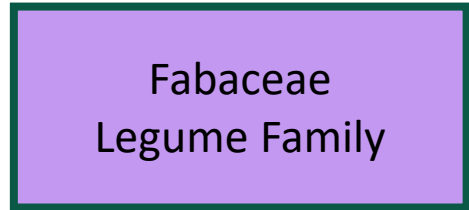
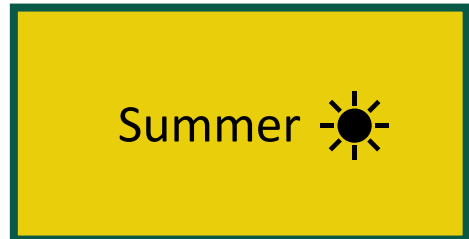
2ft Perennial

Lathyrus pratensis

Meadow Vetchling



Photograph © Thomas McBride



Rhinanthus minor

Yellow Rattle



Photograph © Thomas McBride

None



Late Spring
- Midsummer

Orobanchaceae
Broomrape Family

2ft Perennial

Trifolium pratense

Red Clover



None

Late Spring
- Late Summer

Fabaceae
Legume Family

2ft Perennial



Damp Meadowland Wildflowers



Damp meadowland are regions of grassland that are not well-draining and will hold moisture for most of the year; perhaps flooding occasionally or regularly each winter. A whole different set of wildflowers are found in damp meadows well as some of the more familiar species that are slightly more cosmopolitan in their distribution.

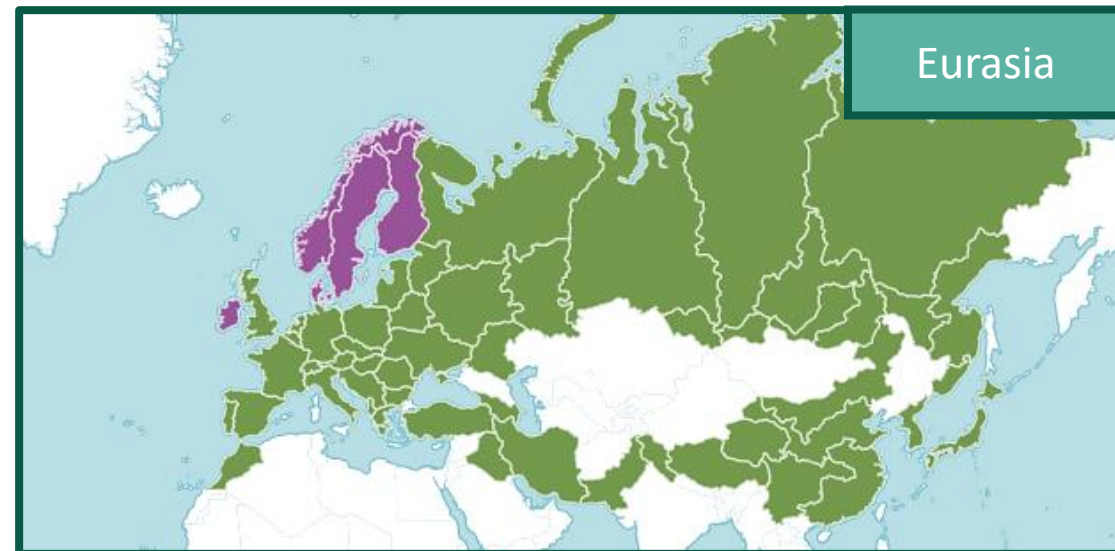
Damp meadowlands are not marshlands, they generally have a water level below the soil for most of the year. However, if you have a plot of land on a floodplain or one that does not drain well, this list of plants may be very beneficial. In a horticultural context, many of these plants are perennials and will do well planted along streams or in damper garden borders.



As with short-grass meadows, if you are planting a meadow from scratch, it is best to lay green hay or to sow plenty of native grass species as well as the wildflower seeds in order to build a semi-natural habitat for wildlife. If you are intending on using these plants in a garden border context, they will thrive well on their own but may pair well with ornamental grasses.

Bistorta officinalis

Common Bistort



Eurasia



Photograph from Flickr (CC) Armin S. Kowalski

'Superba'



Midsummer
- Mid Autumn

Polygonaceae
Knotweed Family

3ft Perennial

Cardamine pratensis

Cuckooflower, Lady's Smock

UK Native



N. America &
Afro-Eurasia



Photograph © Thomas McBride

None



Spring 

Brassicaceae
Mustard Family

2ft Perennial

Chamaenerion angustifolium

Rosebay Willowherb



Photograph from Flickr (CC) Dean Morley

None



Midsummer
- Early Autumn

Onagraceae
Willowherb Family

5ft Perennial

Filipendula ulmaria Meadowsweet

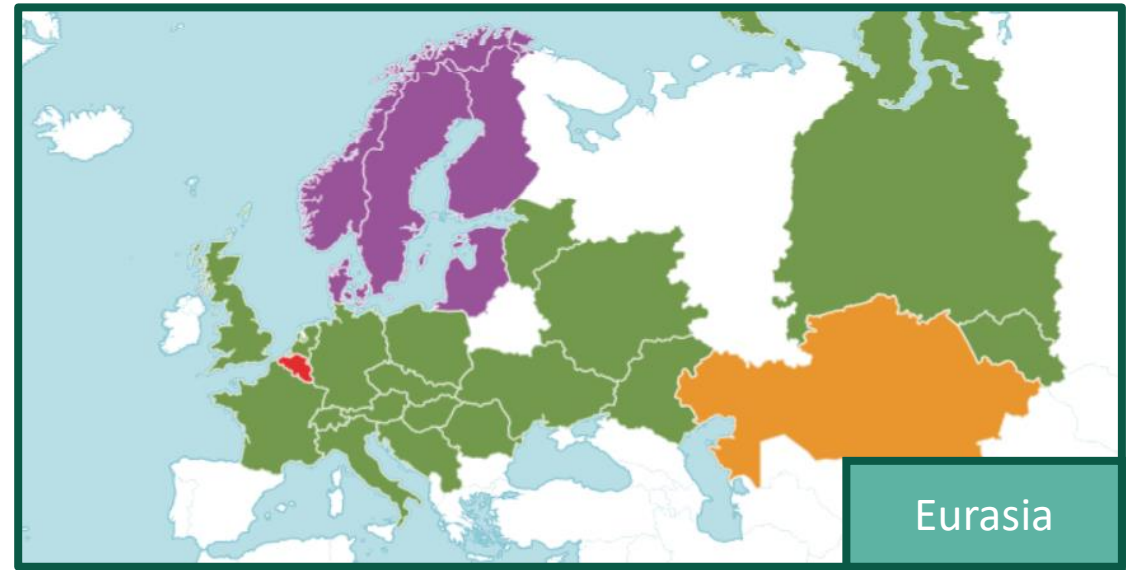


Photograph by Thomas McBride



Fritillaria meleagris

Snake's-head Fritillary



Photograph © Thomas McBride

- Species -
var. unicolor 'Alba'



Spring 

Liliaceae
Lily Family

1ft Bulbous

Lychnis flos-cuculi

Ragged Robin



Photograph from Flickr (CC) Steve Guttman



None

Mid Spring
- Early Summer

Caryophyllaceae
Pink Family

2ft Perennial

Ranunculus flammula

Lesser Spearwort



Photograph from Wikipedia by Krzysztof Golik

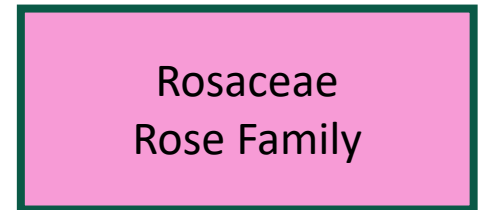
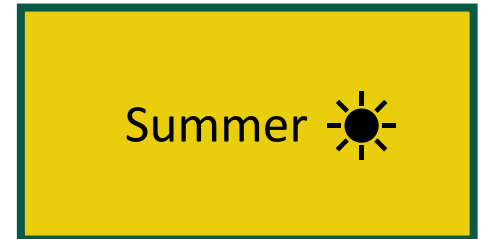


None



Sanguisorba officinalis

Great Burnet



Succisa pratensis

Devil's Bit Scabious



Photograph from Flickr (CC) Ole Hasby



None

Midsummer
- Early Autumn

Caprifoliaceae
Honeysuckle Family

2ft Perennial

Valeriana officinalis

Garden Valerian



Photograph from Flickr (CC) Gail Hampshire



Eurasia

None

Summer ☀

Caprifoliaceae
Honeysuckle Family

4ft Perennial



North American Prairieland Flowers

Unlike the previous categories, prairie grasslands are not native to the UK, so planting species from this list should be done in a purely horticultural capacity; we do not have all the native wildlife to create a flourishing prairie eco-system. That being said, all of these plants will attract lots of pollinators to your garden and can be used in a more traditional garden border or in a purpose prairie-planting area with lots of tall grass species. Also unlike the native wildflowers, most of these species are fairly tall so will pair very well with taller ornamental grasses.

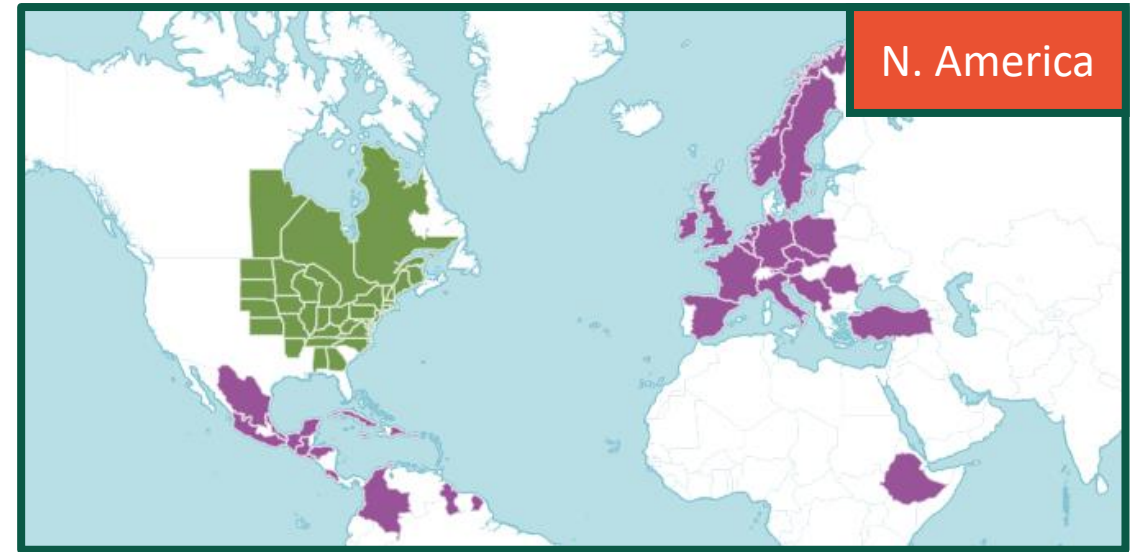


Most of the species on this list prefer a well-draining soil and will thrive in full sun but tolerate partial shade. These species may also be planted with native meadowland species to create a more natural-looking wildflower border with pops of colour from the larger North American species such as Echinaceas, Rudbeckias and Penstemons.



Aster laevis

Smooth Blue Aster



None

Late Summer
- Mid Autumn

Asteraceae
Daisy Family

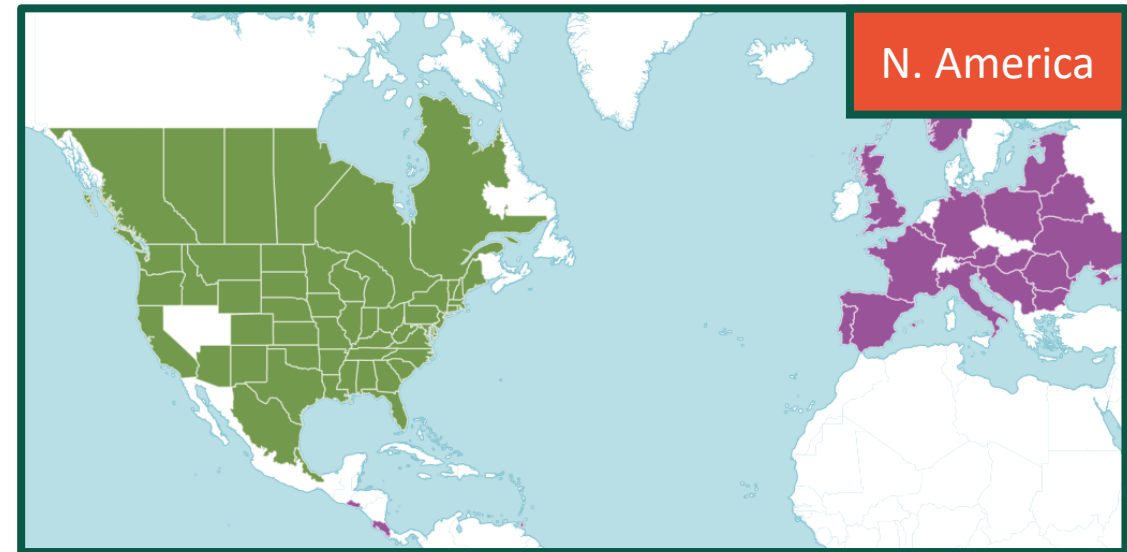
3ft Perennial

Coreopsis tinctoria

Dyer's Tickseed



Photograph from Flickr (CC) Natalie J



'Yellow and Red'



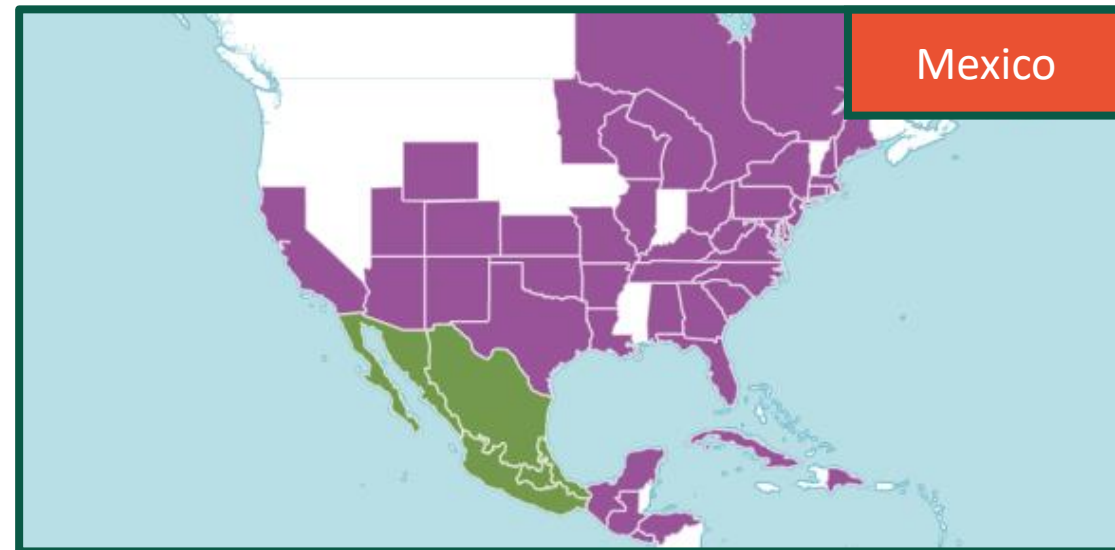
Midsummer
- Mid Autumn

Asteraceae
Daisy Family

3ft Annual

Cosmos bipinnatus

Mexican Daisy



Cosmos sulphureus

Yellow Mexican Daisy



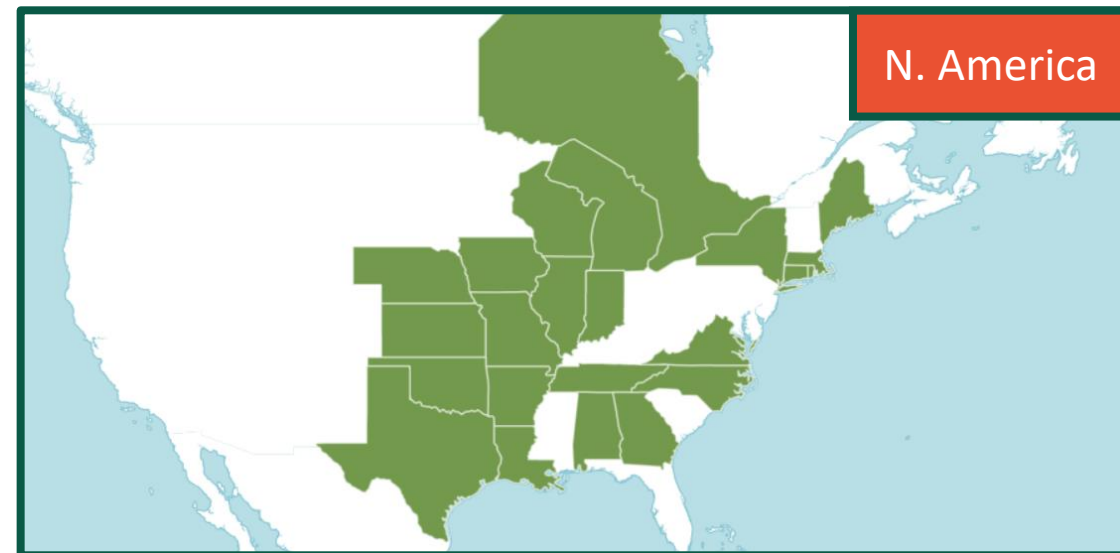
Photograph from Wikipedia (CC) Ramesh NG



* This plant, if sown early, should be sown inside during winter (cannot survive below -5°C night temperatures)

Echinacea pallida

Pale Coneflower

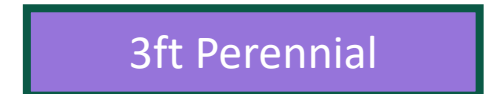
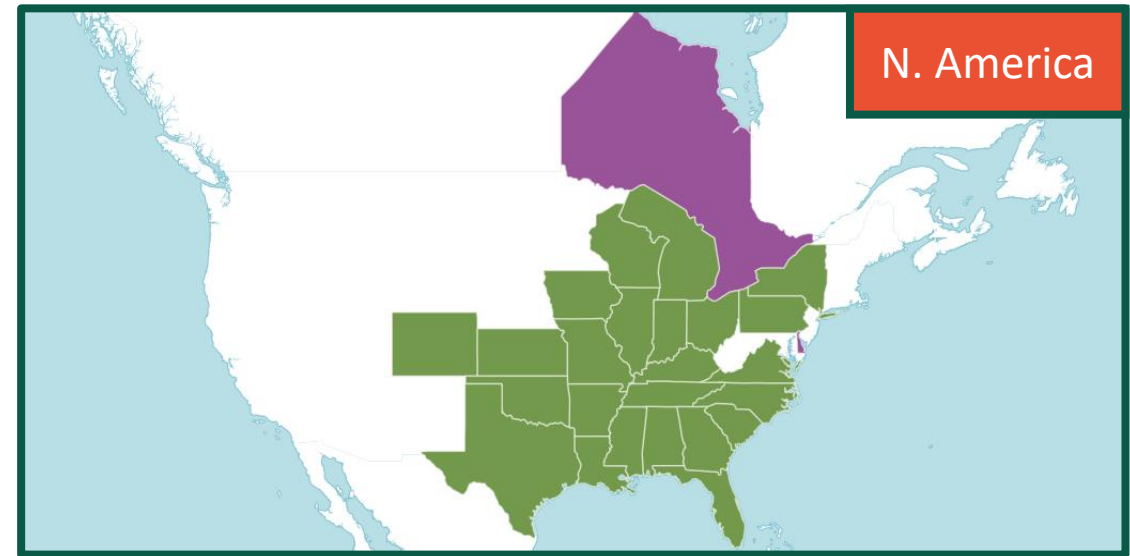


Echinacea purpurea

Purple Coneflower

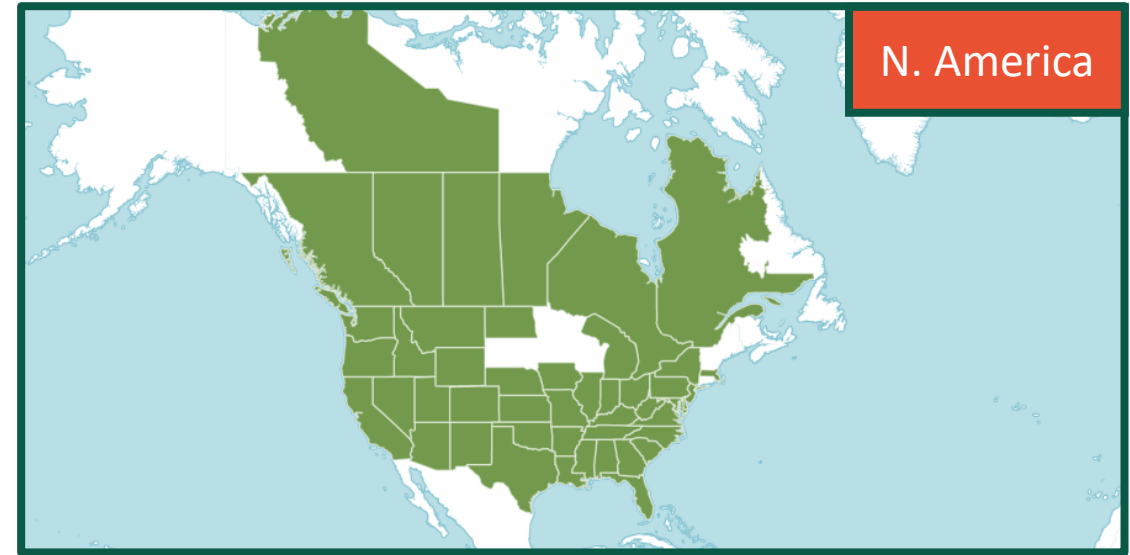


Photograph from Flickr (CC) Alvaro Regaly



Helenium autumnale

Common Sneezeweed



'Ring of Fire'
'Butterpat'



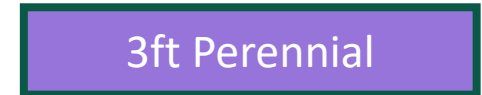
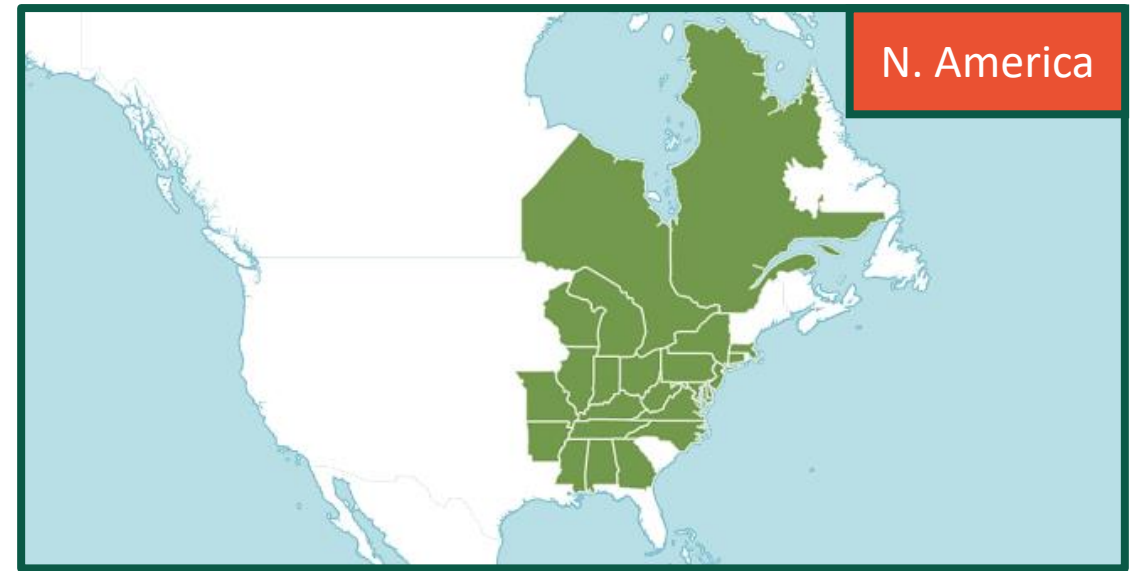
Late Summer
- Mid Autumn

Asteraceae
Daisy Family

3ft Perennial

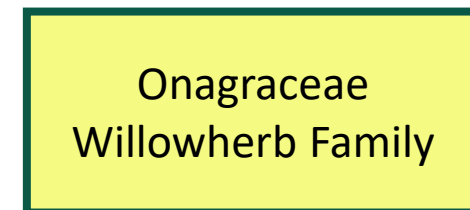
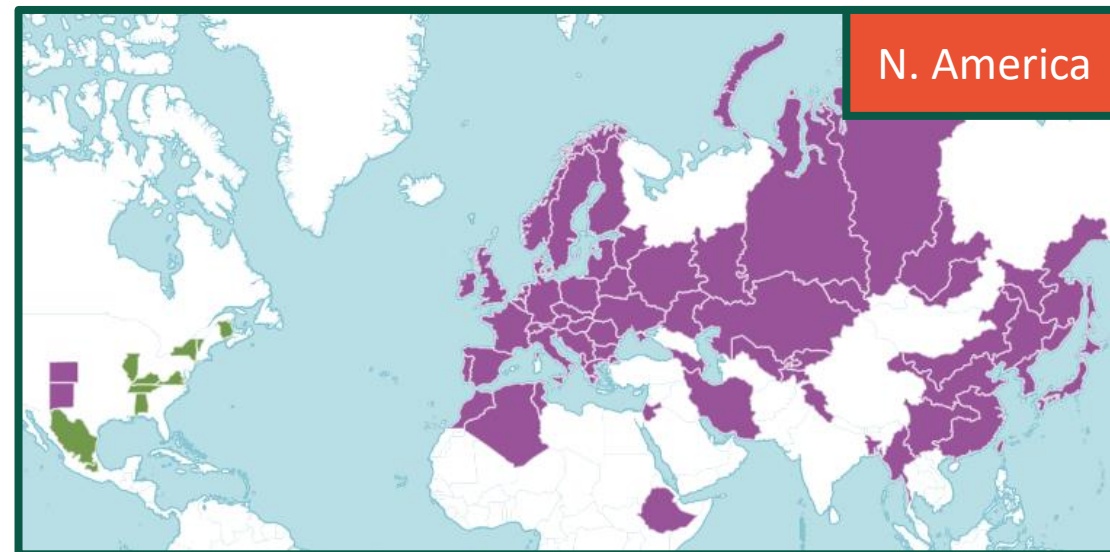
Liatris spicata

Blazing Star



Oenothera biennis

Common Evening-Primrose



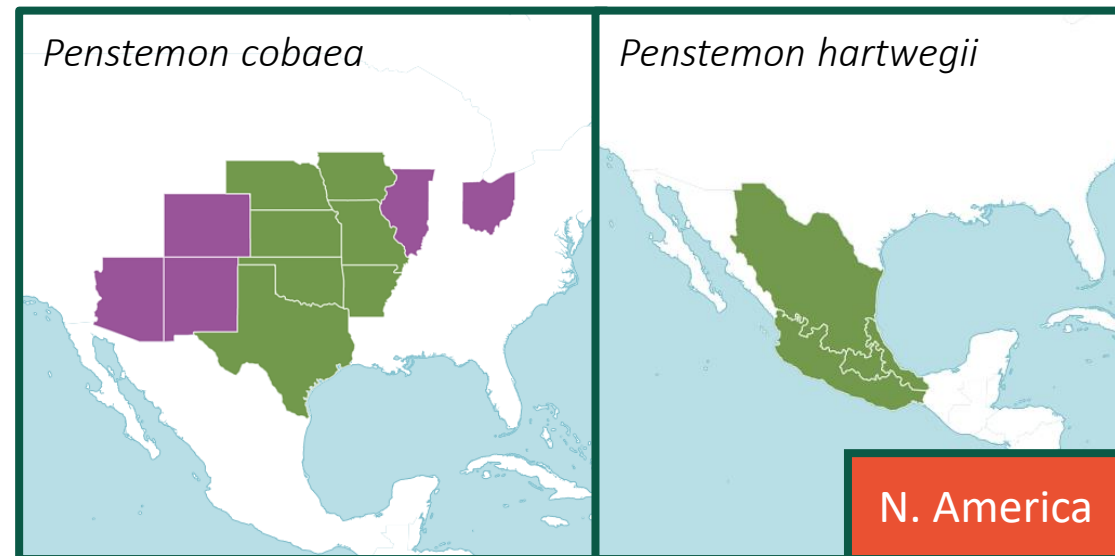
Penstemon x gloxinoides

Garden Penstemon

Penstemon cobaea x *Penstemon hartwegii*



Photograph from Flickr (CC) Manuel M Vicente



'Sour Grapes'
'Stapleford Gem'

RHS AWARD OF GARDEN MERIT

Midsummer
- Early Autumn

Plantaginaceae
Plantain Family

2ft Perennial

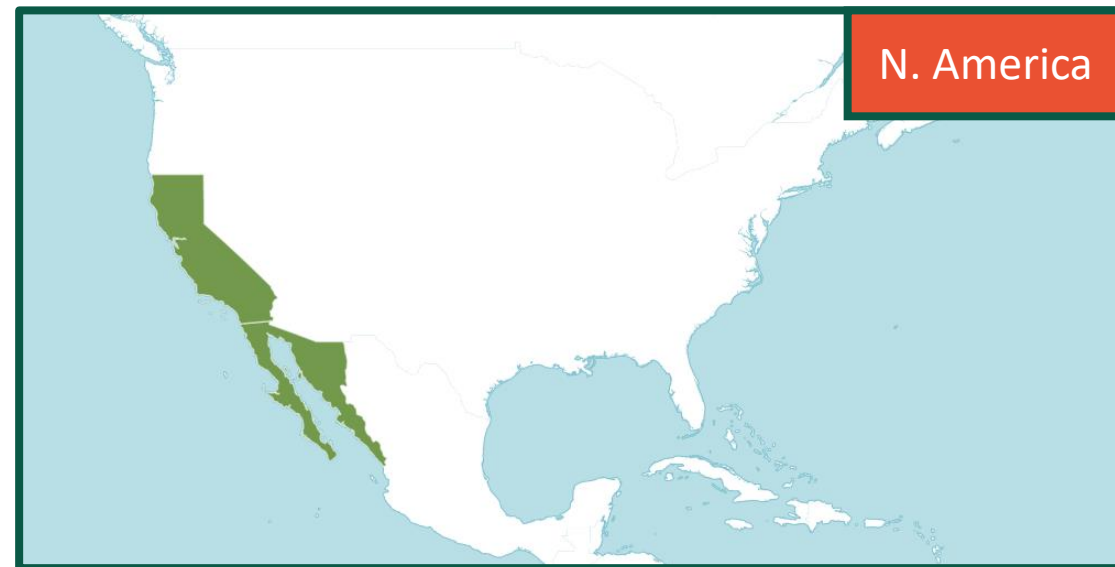
* This plant will not survive below -10°C night temperatures, protect from very harsh winter nights

Phacelia tanacetifolia

Fiddleneck



Photograph from Flickr (CC) Maja Damat



None

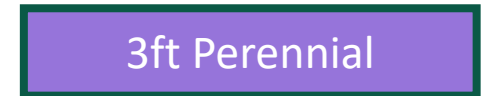
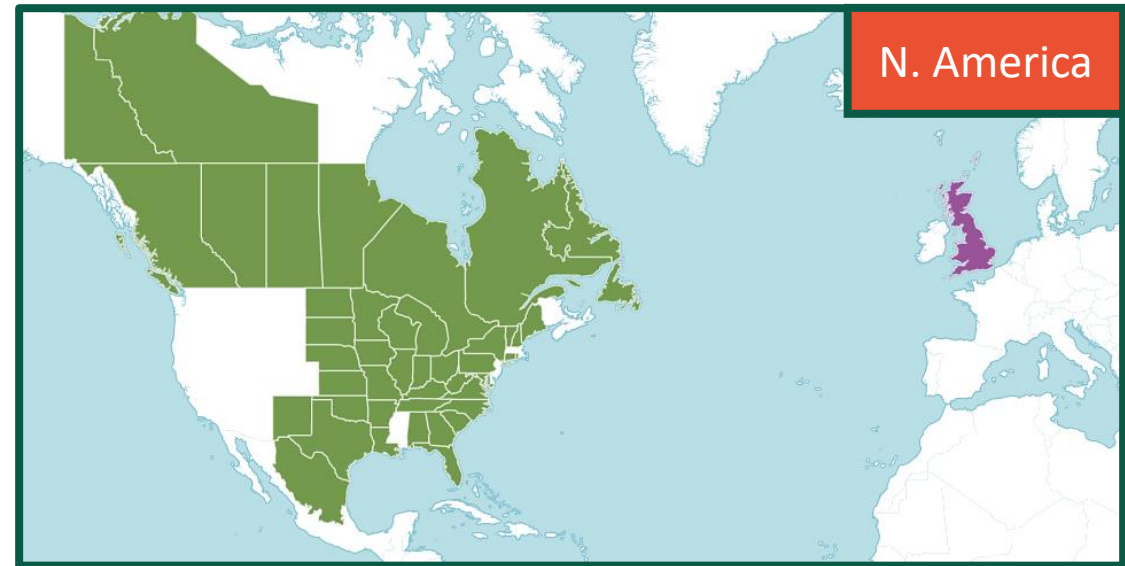
Midsummer
- Early Autumn

Boraginaceae
Borage Family

2ft Annual

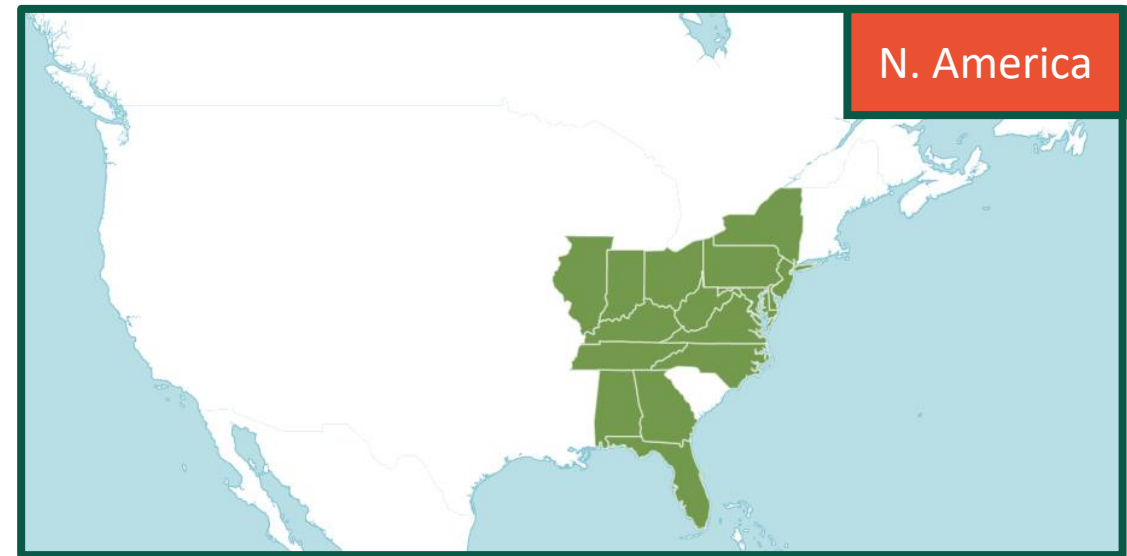
Physostegia virginiana

False Dragon-head



Rudbeckia fulgida

Orange Coneflower



var. deamii
'Goldsturm'



Late Summer
- Mid Autumn

Asteraceae
Daisy Family

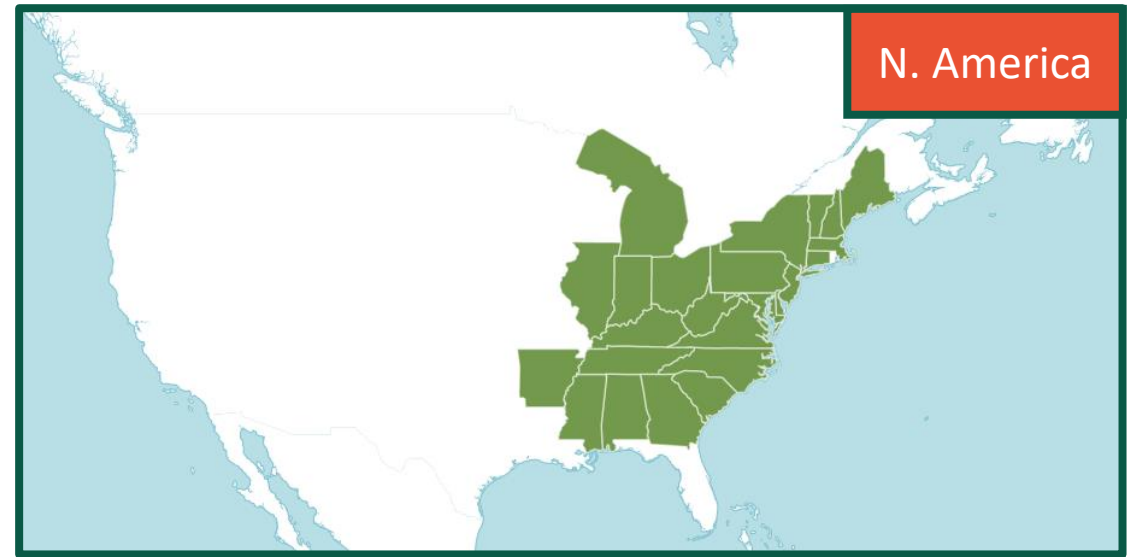
2ft Perennial

Rudbeckia hirta

Black-eyed Susan



Photograph from Flickr (CC) David Siebold



'Indian Summer'
'Toto series'



Late Summer
- Mid Autumn

Asteraceae
Daisy Family

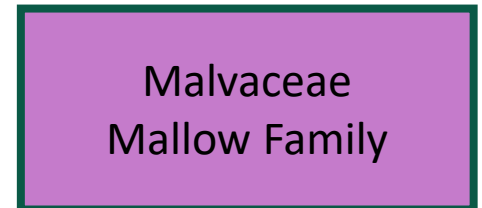
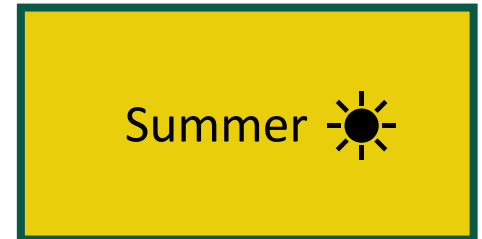
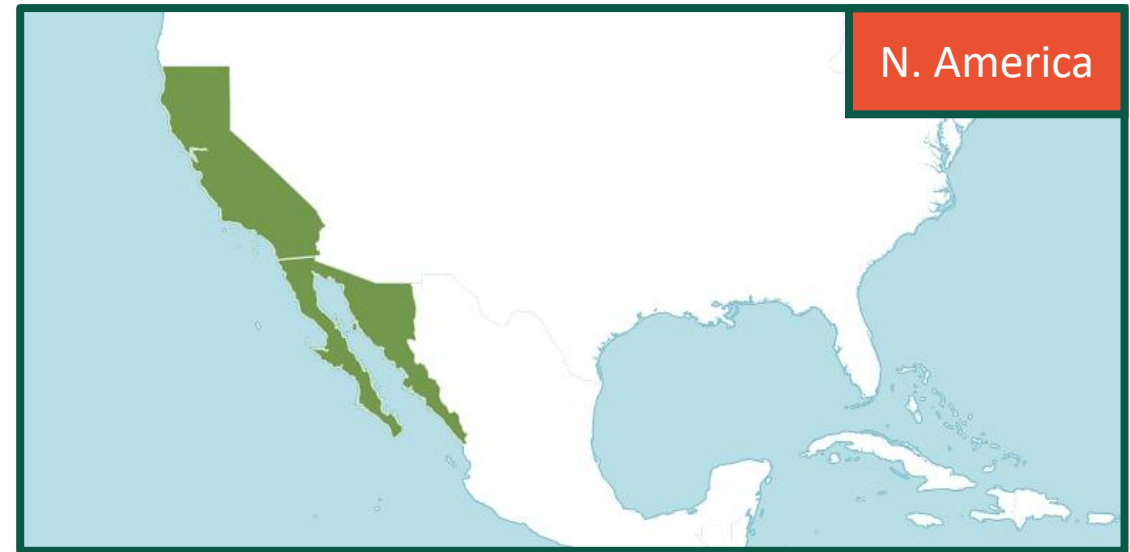
2ft Perennial Grown as
an Annual

Sidalcea malviflora

Prarie Mallow

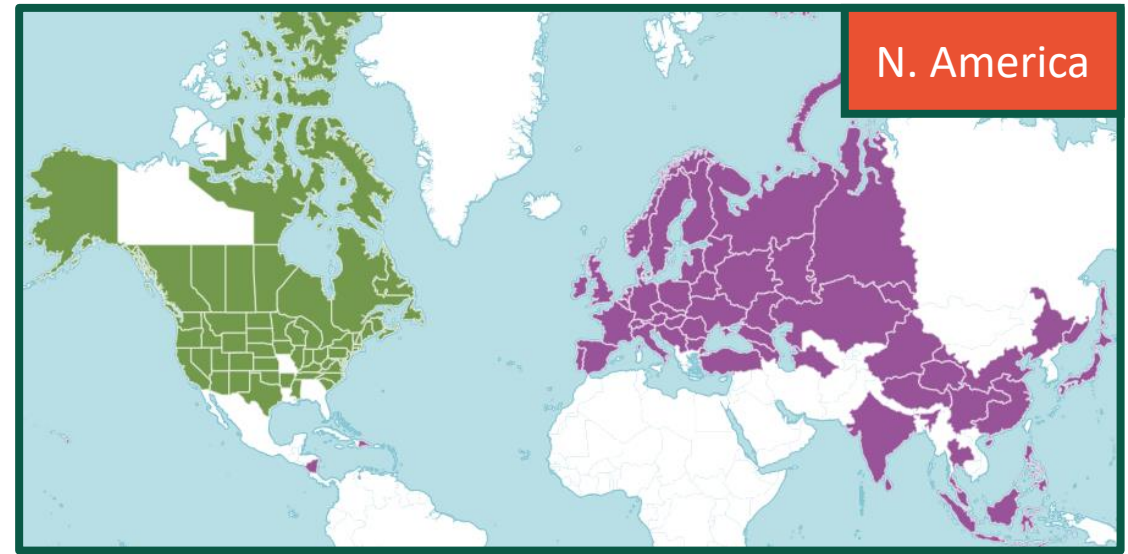


Photograph from Flickr by Philip Bouchard



Solidago canadensis

Canadian Goldenrod



Photograph from Flickr (CC) Marcus Buchwald

'Gardone'
'Goldenmosa'



The logo for the RHS Award of Garden Merit, featuring a green trophy cup inside a circular border with the text "RHS AWARD OF GARDEN MERIT" and a registered trademark symbol. To the right of the logo is a stylized tree icon.

Midsummer
- Mid Autumn

Asteraceae
Daisy Family

3ft Perennial

Veronicastrum virginicum

Culver's Root

