A Guide for Alberta 2021

www.abinvasives.ca

Why eliminate invasive plants from your garden?

Some plants from other parts of the globe originally introduced as garden flowers for landscaping, or their medicinal or food value, have jumped the garden fence to become invasive in the natural environment. Invasive plants are spread by people and our activities. These plants have no natural predators to stop their spread, so they survive, thrive, and dominate, in the wild. These alien invaders cause environmental and habitat degradation, social and economic loss, impact biodiversity and some are a hazard to human and animal health.

While only a small percentage of introduced ornamental plants have become invasive, effective action needs to be taken to avoid planting species known to escape the garden bed. Choosing suitable non-invasive alternatives can help prevent future spread and serve to protect and preserve Alberta's natural environment.

Alberta's Weed Control Act

The invasive plants featured in this brochure either entered Alberta accidentally as a contaminant of seed or soil or were introduced as an ornamental. The invasives in the latter group are no longer sold commercially but are still present in Alberta gardens and traded through plant swaps, local plant sales, and other unregulated activities. It is contrary to the Weed Control Act to grow the species featured in this brochure. Some species are categorized as Noxious and as per the Alberta Weed Control Act must be controlled, while others are categorized as Prohibited Noxious and must be eradicated. The Alberta Weed Control Act was put in place to protect Alberta from these invasive species. Fact sheets on all regulated plants, Noxious and Prohibited Noxious, can be found at www.abinvasives.ca.

What is Canada doing about invasive alien plants?

In Canada, organizations responding to invasive alien plants include federal, territorial, provincial, and municipal governments, universities, colleges, botanical gardens, herbaria (collections of dried plants), non-government environmental organizations, youth groups, businesses, and First Nations groups. Responses to invasive alien plants have included surveys, mapping, management programs, monitoring, and regulations. Preventive programs are widely recognized as the most effective and cost-efficient means of control for invasive alien plants.

Invasive Alien Plants in Canada Summary Report, CFIA, 2008

Your Guide to PLANT WISE Gardening

- Make good choices. Purchase and grow non-invasive exotic or regional native plants. Do your research. Ask your local garden centre or ask a local horticulture expert. Check out abinvasives.ca and Alberta Native Plant Council anpc.ab.ca.
- ✓ Replace existing invasive plants in your garden with noninvasive plants.
- ✓ Treat and remove existing invasive plants using speciesappropriate methods. Check out AISC's factsheets for control methods BEFORE you start: abinvasives.ca.
- ✓ Properly dispose of invasive plants. Remove invasive plants before they flower to prevent seed spread. Check with your local landfill for disposal programs or double-bag invasive species destined for the landfill. Never dispose of invasive plants in natural areas or parks. Never compost invasive plants!
- ✓ Trade only plants and seeds you know are non-invasive.
- ✓ Avoid collecting pretty "wildflowers" from roadsides or natural areas. Many are overly aggressive invasive plants. Allow true native plants to thrive in their natural setting.
- ✓ Avoid pre-packaged wildflower mixes unless the contents are identified and contain only non-invasive species.
- ✓ Encourage others to plant non-invasive plants and to replace existing invasive plants.
- ✓ Mulch and/or use ground covers in open garden areas to prevent invasive plants from establishing.
- Report invasive plants on EDDMapS using your computer or smartphone. Go to eddmaps.org/alberta/ to join for free!

This guide shows you what plants to avoid and examples of good, noninvasive alternatives to consider for your Alberta garden. Choose the right plant for the right place.

This booklet references the United States Department of Agriculture (USDA) Cold Hardiness Zone System and reflects the local knowledge and experience of the Alberta nursery industry.

> PLANT SPECIES NATIVE DROUGHT TOLERANT LOW WATER FULL SUN MODERATE WATER PARTIAL SHADE REGULAR WATER FULL SHADE HIGH WATER

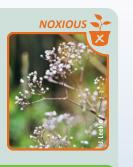
Nomenclature from VASCAN, the <u>Database of Vascular Plants of Canada</u> and ACIMS the Alberta Conservation Information Management System

INVASIVE - AVOID USE

COMMON BABY'S BREATH

Sypsophila paniculata

Ornamental perennial used in floral arrangements. In winter, stems break off, blowing around in the wind, like tumbleweeds, spreading seed to pastures and natural areas. Widespread infestations across Canada and northern United States.



NATIVE & ORNAMENTAL ALTERNATIVES

German Statice Goniolimon tataricum

Prickly heads of tiny white flowers. Low rosettes of leathery green leaves. Branching heads of flowers bloom July - August. For rock gardens, xeriscaping, edging or containers. Excellent as fresh or dried flowers. Popular for wreaths. Attracts butterflies. CAUTION: All plant parts poisonous if eaten. Zone 3



Common Yarrow N Achillea millefolium

Herbaceous perennial with broad, flattened heads of flowers and feathery leaves. Commercial varieties with varying flower colours are also available. Zone 3



Ht. 60-90 cm: W. 60-90 cm

Russian Sage Salvia yangii

Upright bush. Fragrant, grey-green foliage. Lavender blue blossoms. Flowers July to October. Good for cut flowers/dry arrangements. Attracts butterflies. Zone 4



ALSO CONSIDER: Meadow Rue varieties (Thalictrum delavayi) Zone 3; Narrow-leaved Meadowsweet (Spiraea alba DuRoi var. alba) Zone 3; Pearly Everlasting (Anaphalis margaritacea) N Zone 3

BIGHEAD KNAPWEED

Centaurea macrocephala

Brought in as a garden ornamental.



NATIVE & ORNAMENTAL ALTERNATIVES

Black-eved Susan M Rudbeckia hirta

Bright-yellow, 5-8 cm wide, daisy-like flowers with dark centers occur singly atop each stem. It is covered with hairs that give it a slightly rough texture. Blooms late summer and into the fall. A great selection for large or small landscapes. Annual to short-lived perennial. Zone 3



Ht. 30-90 cm; W. 30-45 cm

Globeflower

Trollius chinensis

An extremely popular perennial that bursts into colour in late spring and early summer and has contrasting deep green leaves. Easy care, it grows well in a sunny or part-shaded border, also at the edge of moist woodland. Flowers will last a few days when cut. Zone 3



Ht. 75-90 cm: W. 45-60 cm

Prairie Coneflower N Ratibida columnifera

This perennial coneflower is a valuable addition to any dry, sunny border being drought tolerant and suitable for xeriscaping. The flowers resemble small hats, with yellow reflexed ray petals and large greenish-brown columnar centers. Attracts bees, butterflies and birds. Flowers are good for cutting. Zone 3

Ht. 60-90 cm: W.40-50 cm

ALSO CONSIDER: Hardy Lily Species (Lillium dauricum (L. pensylvanicum)) Zone 3; Lemon Daylily (Hemerocallis flava (H. lilioasphodelu)) Zone 3

Long-lived perennial which outcompetes native vegetation. Reproduces by seed. Yellow florets on a large flower base or "big head". Difficult to remove once established.

HIMALAYAN BALSAM

npatiens glandulifera

Fast-growing annual. Can reach an impressive size, rapidly out-competing other plants, especially in riparian areas and along shorelines. Orchid-shaped flower resembling a British policeman's helmet. Mature, brittle seed capsules explode upon contact, catapulting seeds 6 metres or more. Shallow root system makes it easily controlled by hand-pulling.



NATIVE & ORNAMENTAL ALTERNATIVES

Smooth Blue Beardtongue M Penstemon nitidus

Incredibly blue, tubular flowers rise above thick, pale green/grey leaves. Flowers late May to early July depending on elevation. Excellent for rock gardens. Best in gravelly, well drained soil. Attract butterflies and hummingbirds. Zone 3

Ht. 20-30 cm: W. 15-25 cm

Gas Plant

Dictamnus albus var. purpureus

Long-lived, unique perennial. Lemon scented, glossy green leaves. Bushy, upright clumps. Spikes of spidery-looking mauve-pink flowers. Flowers early summer. Worthwhile for cutting. Attracts butterflies. Zone 2



Cardinal Flower Lobelia cardinalis

An eastern North American native herbaceous perennial that grows well in wet or even boggy soils. Flowers are brilliant vermillion red, produced through summer into fall on flowering stalks a metre in height. Cultivars with green or bronze-purple leaves and white or pink flowers are available. Zone 2



ALSO CONSIDER: Blue Boy Garden Phlox (Phlox paniculata) Zone 3; Blue columbine (Aquilegia brevistyla) 📝 Zone 3; Candle Larkspur (Delphinium elatum) Zone 2; Pink turtle (Chelone Iyonii, C. obliqua)

OXEYE DAISY

Leucanthemum vulgare

Perennial plant introduced as a pond ornamental. Pale yellow flowers. Has tuberous roots and reproduces by seed and fast-moving rhizomes. Forms dense thickets which increase sedimentation and completely changes the habitat. (Caution: Oxeye Daisy seeds are often found in Wildflower mixes)



grow me 👉

NATIVE & ORNAMENTAL ALTERNATIVES

Alpine Aster N Aster alpinus

Branching stems, single daisy-shaped, clear white, yellow-eyed flowers on low clumps of bright green leaves. Blooms in late spring/ early summer. Grow in rock gardens or used for edging. Self-seeds to produce successive generations. Zone 3



Ht. 20-30 cm; W. spreading

White Swan Coneflower Echinacea purpurea 'White Swan'

A white-flowered variety of the common purple coneflower. The 8 cm diameter flowers have white rays and coppery conical centers on long stems making them ideal cut flowers. Blooms profusely all summer long and is perfect for beds, borders, and naturalized areas. Drought, deer, heat, humidity, and poor soil tolerant. Zone 3



Tufted Fleabane 🐠 Erigeron caespitosus

A single plant will produce numerous white or light pink daisy-like flowers in groups of 1-4 at the ends of upper branches. Foliage and stems are covered with stiff hairs. Drought and heat tolerant. Great for rock gardens and dry sunny garden beds. Zone 3



ALSO CONSIDER: Biokovo Cranesbill Geranium (2015 Perennial Plant of the Year) (Geranium × cantabrigiense 'Biokovo') Zone 3; Showy Fleabane (Erigeron speciosus) N Zone 2; Lance-leaved Tickseed (Coreopsis lanceolata) Zone 3



"ALERT" SPECIES

The following species are not regulated invasive species in Alberta but are regulated in neighbouring jurisdictions. They are problematic in certain areas of our province. Purchase and/or plant these species with caution.

- Bachelor's Buttons (Centaurea cyanus)
- Bishop's Goutweed
- Cypress Spurge
- (Euphorbia cyparissias) • Mountain Star-thistle

(Aegopodium podagraria)

(Centaurea montana)

For more information on these Alert Species visit abinvasives.ca

There are several aquatic invasive plants, fish and other species that are regulated in Alberta under the Alberta Fisheries Act. Look for factsheets on these species at abinvasives.ca



Prevention inspired; Alberta protected

www.abinvasives.ca | info@abinvasives.ca

Acknowledgements

This brochure was based on the following publications: Earlier Weed Wise Gardening and current 2015 Grow Me Instead Alberta Invasive Species Council); Grow Me Instead (Invasive Species Council of British Columbia: Saskatchewan Invasive Species Council; Yukon Invasive Species Council; and Ontario Invasive Plant Council - Northern Version)

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Medicine Hat

• Russian Olive (Elaeagnus angustifolia)

• Lamium species (Lamium species)

• Scotch Broom (Cytisus scoparius)

• Lily of the Valley (Convallaria majalis)

• Common Caragana

(Caragana arborescens)

grow me instead

A portion of the funds for this brochure/booklet came from a creative sentence that the Provincial Court of Alberta imposed as a result of an Environmental Protection and Enhancement Act infraction.

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INVASIVE - AVOID USE

YELLOW CLEMATIS

Clematis tangutica

Spreading vine plant. Yellow, pendant flowers. Seeds have silky, long tufts easily carried on wind and water. Aggressive plant once established. Urban and natural area infestations are becoming more common, displacing native flora and increasing fire hazard. This species is also moving into mountain parks.



NATIVE & ORNAMENTAL ALTERNATIVES

Honeybelle Honeysuckle Lonicera x brownii

Deep golden coloured flowers. Compact twining vine. Clean, round medium-green foliage. Blossoms throughout the season. Attracts hummingbirds and butterflies. Zone 4



Ht. 3-6 m; W. 3-6 m

Dropmore Scarlet Honeysuckle Lonicera x brownii 'dropmore scarlet'

Fast-growing twining vine with waxy green leaves and showy orange to scarlet trumpet-

shaped flowers. Blooms throughout the summer. Prefers full sun but will grow and flower with partial shade. Developed in Manitoba for Canadian prairie conditions.



Western White Clematis Clematis liqusticifolia

Lovely white flowers with yellow centers. Blooms June/July. Decorative "Old Man's Beard" seed head. Twining climber that does not die back to the ground over winter. Zone 3



ALSO CONSIDER: Common Hop (Humulus) (Zone 3; Persian Yellow Rose (Rosa foetida persiana) Zone 4; Hardy grapes, Zone 3

DAME'S ROCKET

Often confused with garden phlox. Dame's rocket has 4 petals and alternate leaves, phlox has 5 petals and opposite leaves. Flower colour can be magenta through to pink or white. Considered a "traditional" garden flower. Prolific seed producer often found in "wildflower" mixes. Especially problematic



NATIVE & ORNAMENTAL ALTERNATIVES

Garden Phlox Phlox paniculata

near woodlands.

esperis matronalis

Native to eastern and central United States and eastern Canada, it is a summer garden favourite due to the clouds of billowy blooms, long flowering season, and easy care. The five-petaled flowers are packed into dense clusters. Many cultivars available in a range of flower colours, and fragrances. Attracts hummingbirds and butterflies. Zone 3



Ht. 30-120 cm: W. 50-70 cn

Spotted Joe-pye Weed Eutrochium maculatum var. maculatum

Native to Canada, this attractive plant produces pale pink-purple flowers atop red stems that last mid-summer through fall. A must have for wildflower lovers, it attracts a multitude of butterflies with its sweet nectar. Zone 3



Ht. 60-160 cm: W. 60-90 cm

Giant Hyssop 🕅 Agastache foeniculum

Plant this species as an ornamental or in the herb garden. Short-lived perennial that reseeds and grows in a clumping habit. Small blue-purple flowers in fuzzy spikes bloom all summer and into fall. Flowers are edible and can be crumbled into salads or made into tea. Mint and licorice scented foliage. Attracts bees, butterflies, and hummingbirds. Zone 4



ALSO CONSIDER: Autumn Joy Sedum (Sedum x 'Autumn Joy') Zone 2; Blue False Indigo (Baptisia australis) Zone 3, Wild Bergamot (Monarda fistulosa) 🕥 Zone 3

CREEPING BELLFLOWER

Bell-shaped, blue flowers on leafy stalks. Reproduces by seeds, creeping rhizomes, and tuberous root pieces. Rhizomes can spread under fences and concrete. Produces up to 15,000 seeds per plant. Can displace and dominate lawns and perennial gardens. Survives periods of drought and resistant to some herbicides. Extremely difficult to eradicate.



NATIVE & ORNAMENTAL ALTERNATIVES

Carpathian Harebell Campanula carpatica

Perennial mounds of blue, cup-like flowers, 2.5 cm across, atop a compact rounded clump of dark green leaves. Blooms June to September, Excellent for borders and edging Zone 3



Smooth Blue Beardtongue N Penstemon nitidus

Incredibly blue, tubular flowers rise above thick, pale green/grey leaves. Flowers late May to early July depending on elevation. Excellent for rock gardens. Best in gravelly, well drained soil. Attract butterflies and hummingbirds. Zone 3



Ht. 20-30 cm; W. 20-40 cm

Tall Lungwort N Mertensia paniculata

Native across most of North America; common in the boreal forest in central and northern Alberta. Large plant and should be given room to spread out. Combine with other shade-loving native plants to create a naturalized area in the garden. Zone 3



Ht. 10-70 cm; W. spreading

ALSO CONSIDER: Wild Bergamot (Monarda fistulosa) (7 Zone 3; Larkspur/Delphinium (Delphinium spp. ornamental varieties) Zone 3; Silvery Perennial Lupine (Lupinus argenteus) \(\textstyle \text{Zone 3} \)

PURPLE LOOSESTRIFE

ythrum salicaria

Tall strong purple spires. Takes over ponds, beaches, marshes, farm dugouts, and irrigation canals. A mature plant can produce 2.5 million seeds. Ornamental Lythrum cultivars, originally considered sterile, have proven fertile when cross-pollinated, including 'Morden' varieties developed by Agriculture Canada. Still present in Alberta despite previous eradication efforts.

NATIVE & ORNAMENTAL ALTERNATIVES

Tall Larkspur N Delphinium glaucum

Rising from a woody rootstock, this stout, tall perennial has deeply cut leaves, and both stem and leaves have a greyish, waxy covering. Spikes of deep blue to purple flowers up to 30 cm tall. Zone 3



X

Meadow Blazingstar 🗗 Liatris liqulistylis

Both L. liqulistylis and L. puncata are native to AB. Easy to grow in a range of soils and conditions but prefer dry, sandy or rocky, alkaline soils. Stems rise from basal tufts of narrow, lance-shaped leaves. Fluffy, deep rosepurple flower heads in columnar inflorescences form at tops of leafy stems. Good in a mixed garden planting or as a specimen plant. Extremely attractive to butterflies. Zone 3



Wood Betony Stachys officinalis 'Hummelo'

2019 Perennial Plant of the Year. Drought tolerant, deer and rabbit resistant, and pollinators are attracted to the nectar provided by the tiny orchid-like flowers that make up the bottlebrush spikes. Blooms beginning in mid-June make good cut-flowers. Great as an edging plant towards the front of the border. Keeps its compact shape without pruning. Zone 3



Ht. 30-60 cm; W. 30-60 cm

ALSO CONSIDER: Spike Speedwell (Veronica spicata) Zone 3; Karl Foerster Feather Reed Grass (Calamagrostis x acutiflora 'Karl Foerster') Zone 3; Wilson's Ligularia (Ligularia wilsoniana) Zone 2

SALT CEDAR

Amelanchier alnifolia

amarix spp.

Deciduous shrub/small tree that grows 3-4 metres tall. Scale-like leaves concentrate salt from ground water in saline soil—makes it unsuitable for many native plants. Deeprooted and consumes as much as 750 litres of water per day. Can produce 600,000 seeds annually that are easily dispersed by wind and water. Severed stems root readily.

Why not make your garden edible as well as

beautiful! Typically, an erect shrub, there are

many wonderful varieties available varying in

height, time of flowering and maturity of fruit.

Flowers are fragrant, berries are sweet, and

foliage turns orange and red in the fall. Zone 2

Selected from a North American wildflower,

Coarsely divided green leaves. Forms mounds

Beautiful, classic fragrance and local nurseries

carry varieties for cold climates. Blooms vary

from early spring to mid-summer. Adapted

to many soil types/climate conditions. From

low urban hedges, e.g. Dwarf Korean Lilac (S.

meyeri 'Palibin'), to large shrubs for screening,

e.g. Donald Wyman Lilac (S. x prestoniae

Queen of the Prairie is a bold accent plant.

with large panicles of bright pink flowers.

Oueen of the Prairie

Filipendula rubra 'Venusta'

Sturdy upright stems. Zone 2

Lilacs

Syringa spp.

NATIVE & ORNAMENTAL ALTERNATIVES

Saskatoon Serviceberry 🗸 🏓 🌢 🐧 🗸



Ht. 1.5-4 m; W. 1.5-3 m

Ht. 120-180 cm; W. 60-90 cm

Many contain seeds of non-native, aggressive plant species legislated as invasive. Contents are rarely listed accurately by their scientific names. The wide variety of common names used for some plants adds to the confusion. Never purchase a seed mix without clearly

abeled scientific names on the packet and be aware that some seed packets with contents labeled may still contain surprise invaders not listed.

Planting individual packets of

to, and adapted for, a specific area.

your favourite wildflowers. It is far less work than battling unwanted invasive plants for years.



Making your own wildflower mix. Purchase

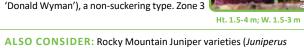
packets of your favourite flowers, in the colours and sizes right for your garden, mix them and plant your own wildflower garden.

Considering local native plants. Research the native plant growers/suppliers in your area. Choose one of the most reputable local sources for seed to ensure species planted are native

Caution: Regional mixes (those listed for certain general areas e.g. Prairie mixes) do not necessarily contain native seed.

See also: Alberta Native Plant Council's Guidelines for Purchase and Use of Wildflower Seed Mixes anpc.ab.ca





scopulorum) (7 Zone 3; Ninebark shrub varieties (Physocarpus

opulifolius) Zone 2; Prickly Wildrose (Rosa acicularis) 🚺 Zone 2













