



Annual and Perennial Flower Selections For North Dakota

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Annuals and perennials are an excellent source of color and accent to North Dakota landscapes. Annuals are used for their continuous flower color throughout most of the growing season. Because North Dakota summers are so unpredictable, it is usually a good idea to use transplants after killing frost threats have passed. Perennials are used for their permanence in the landscape setting, offering specific periods of bloom, relatively low maintenance, and wide adaptability.

Where annuals are started anew each growing season, perennials can usually be divided in the spring or fall. These new divisions can either be replanted or given to a friend or neighbor.

The organization of this circular is to provide annual suggestions for specific locations in and around the landscape: Low growing plants, tall, shade, full sun/dry locations, for massing, naturalizing, and fragrance. This does not mean that a plant selected for a particular location absolutely cannot grow in another type of location. It is merely a guide indicating where the selected plants grow best under those conditions. Some plants may be listed in more than one category.



Annuals

Low Growing (6"-8")

Ageratum
Alyssum – ‘Carpet of Snow’
Dahlberg Daisy
Dianthus – Princes Series
Dusty Miller
Lobelia
Marigolds (Dwarf)
Moss Rose
Nemophila
Nierembergia
Pansy
Snapdragons (Dwarf)
Vinca – Carpet Series
Zinnia (Dwarf)

Tall Plants (24" - 48"+)

Cannas
Celosia
Cleome
Cosmos – Sensation Mix
Fountain Grass
Marigold – Climax & Jubilee Series
Nicotiana
Snapdragon – Rocket Strains
Statice
Sweet Pea – Vine to 6'+
Zinnia – Specific cultivars

Intermediate Height (10"-20")

Begonia (wax)
Gaillardia ‘Red Humel’
Gomphrena
Geranium
Impatiens
Marigold – Zenith, Discovery
Petunia
Salvia splendens
Verbena
Vinca
Zinnia angustifolia

Plants For Shade

Begonia – Wax and Tuberous
Coleus
Dahlberg Daisy – Light
Impatiens
Lobelia – Light
Myosotis – (Forget-Me-Not)
Nemisia – Light
Nemophila – Light
Nicotiana – Light
Nigella
Pansy
Poppy – Light, or east side
Rudbeckia – Light
Torenia – Light

Full Sun/ Dry Locations

Calendula – Prince Series
California Poppy
Cleome
Dusty Miller (Senecio)
Eustoma (Lisanthus)
Gaillardia
Moss Rose – ‘Magic Carpet’
Statice (Limonium)
Sanvitalia
Tithonia (Mexican Sunflower)
Verbena

Striking Flower Show – Massed Plantings

Alyssum – ‘Carpet of Snow’
Dianthus – Princess Series
Dahlberg Daisy
Geranium – Orbit & Ringo Series
Marigold – Jubilee Series
Petunia – Multifloras
Portulaca (Moss Rose)
Salvia – Sizzler Series
Snapdragon – Sweetheart Series
Verbena
Zinnia

Plants For Naturalizing

Campanula (Tall Bellflower)
Cleome
Forget-Me-Not (Myosotis)
Fountain Grass (Pennisetum spp.)
Gaillardia (Indian Blanket)
Hare’s Tail (Lagarus ovatus)
Lupinus (Texas Bluebonnet)
Nigella (Love-In-A-Mist)
Rudbeckia (Black-Eyed-Susan)

Annuals Planted For Fragrance

Alyssum
Four-O’Clock
Heliotrope
Mignonette
Moonflower (vine)
Nasturtium
Nicotiana
Pincushion Flower
Snapdragon
Stock
Sweet Pea

Annuals For Drying

Amaranthus caudatus
Fountain Grass
Gomphrena
Helichrysum (strawflower)
Quaking Grass
Salvia farinaceae
Statice

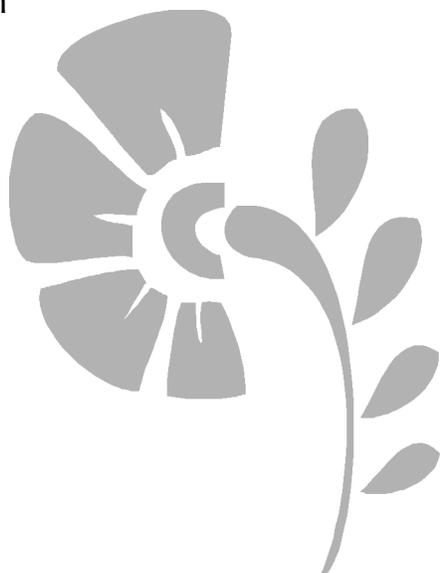


Perennials

Perennials are often used to solve trouble some spots in the landscape. Some of these areas might be wet, dry, shady, or possess infertile soil. Perennials are effective background plantings, for naturalizing, or simply as a border to define a planting bed.

Wet areas could be planted with *Iris sibirica*, *Monarda didyma*, and *Viola odorata*. For dry areas, the use of *Achillea* or *Hemerocallis* might be considered. Where the soil is poor, *Gypsophila* or Blue False Indigo (*Baptisia australis*) could be used. For tall background plantings, consider *Phlox paniculata* or *Boltonia asteroides* 'Snow-bank'. Naturalized plantings may use the Prairie Gayfeather (*Liatris*) or *Echinacea*, while rocky areas will accommodate plantings of *Columbine* (*Aquilegia*) and *Basket-of-Gold* (*Aurinia saxatilis* 'Citrina'). Borders can be accented effectively with *Snow-In-Summer* (*Cerastium tomentosum*) or *Phlox subulata* (Moss Pink).

Perennial selection can be made on the basis of flower color and the season of bloom. The following selections will highlight these qualities.



Color Guide

Blue to Purple

Ajuga
Aquilegia
Aster
Campanula
Delphinium
Echinacea
Hosta
Iris
Liatris
Phlox
Platycodon
Salvia
Scabiosa
Veronica
Viola

Pink to Red

Achillea millefolium
Aster
Astilbe
Boltonia
Dianthus
Dicentra
Echinacea
Erigeron
Geranium
Hemerocallis
Heuchera
Iris
Lobelia cardinalis
Lychnis calcedonica
Paeonia
Phlox
Physostegia
Salvia 'Rose Queen'
Sedum spectabile

Gray to Blue, & Variegated Foliage

Achillea
Ajuga
Artemisia
Cerastium
Dianthus
Echinops
Gypsophila

Heuchera
Hosta
Lamium
Sedum
Thymus

Yellow to Orange

Achillea 'Coronation Gold'
Alchemilla
Aurinia saxatilis
Coreopsis
Gaillardia
Hemerocallis
Heliopsis
Iris
Ligularia
Linum flavum
Oenothera
Papaver orientale
Ratibida
Rudbeckia
Sedum
Solidago

White

Achillea 'Angels Breath'
Arabis albidia
Aruncus
Aster
Astilbe
Boltonia
Cerastium
Dendranthemum
Dianthus
Dicentra
Dictamnus
Echinacea
Gypsophila
Hosta
Iris
Paeonia
Phlox
Veronica
Yucca

Season of Bloom

May to June

Ajuga
Aster
Cerastium
Dicentra
Dictamnus
Erigeron
Geranium
Iris
Paeonia
Lychins chalcedonica
Viola

June to July

Aruncus
Campanula
Delphinium
Heuchera
Salvia 'Rose Queen'
Yucca

July to August

Achillea 'Angels Breath'
Ligularia
Lobelia cardinalis
Monarda
Physostegia
Ratibida

August to September

Aster
Boltonia
Sedum spectabile

Extended Season of Bloom

Achillea millefolium
Aquilegia
Coreopsis
Echinacea
Dianthus
Gaillardia
Gypsophila
Heliopsis
Hemerocallis
Hosta
Liatris
Linum flavum
Oenothera
Phlox
Rudbeckia
Sedum
Solidago
Veronica

Heights:

Under 12"

Ajuga
Asarum
Aurinia
Cerastium
Dianthus deltoides
Coreopsis 'Golden Shower'
Iris cristata
Iris pumila
Oenothera missourensis
Phlox subulata
Sedum
Viola

12-24"

Achillea 'Baby's Breath'
Achillea 'Moonshine'
Achillea 'Fire King'
Arum
Asarum
Campanula rotundifolia
Coreopsis auriculata 'Nana'
Dendranthemum
Dianthus barbatus
Dictamnus albus
Erigeron 'Walther'
Geranium
Heuchera sanguinea
Hosta lancifolia
Iris, Bearded
Linum perenne
Lychnis X arkwrightii
Paeonia tenuifolia
Phlox divaricata
Sedum aizoon
Sedum 'Autumn Joy'
Sedum spectabile
Veronica 'Crater Lake Blue'
Veronica spicata

Over 24"

Achillea filpendulina
Aquilegia canadensis
Aster
Astilbe
Boltonia asteroides 'Snowbank'
Campanula glomerata
Coreopsis 'Golden Shower'
Delphinium elatum
Dictamnus albus 'Purpureus'
Echinacea purpurea
Echinops vitro
Eryngium X zabelii 'Amethyst'
Gypsophila paniculata
Hosta sieboldiana
Iris
Liatris spicata
Lychnis chalcedonica
Monarda didyma
Papaver orientale
Phlox paniculata
Physostegia virginiana
Rudbeckia
Salvia
Solidago 'Gold Dwarf'
Veronica virginica
Yucca

Foliar Impacts

Gray, Blue, & Variegated – Season Long

Achillea
Ajuga
Artemisia
Cerastium
Dianthus
Echinops
Gypsophila
Heuchera
Hosta
Lamium
Perovskia
Sedum
Thymus

Shade Tolerant Perennials

Ajuga spp.
Aquilegia canadensis
Asarum canadense
Astilbe spp.
Bergenia cordifolia
Campanula spp.
Centaurea macrocephala
Cimicifuga racemosa
Coreopsis spp.
Dicentra spectabilis
Digitalis spp.
Hosta spp.
Lamium spp.
Mertensia virginica
Myosotis spp.
Phlox divaricata
Ranunculus repens
Sedum kamtschaticum



Current All-America Selection (AAS) Winners

The red, white and blue logo of All-America Selections (AAS) on vegetable and flower seed packets, bedding plant tags, in catalogs and in garden articles is a promise of gardening success under most circumstances – even in North Dakota! For the past 68 years, AAS has taken the guess work out of finding flower and vegetable varieties that will be reliable, vigorous, productive and that show marked improvements over other varieties currently available.

While not a trial grounds, the campus gardens on the western part of the NDSU campus are AAS Display gardens that attract hundreds of visitors during the growing season. The upcoming 1999 AAS plants were trialed in our gardens in Fargo and at the Dickinson Research and Extension Center. To get a glimpse of what will be available to the public for the next gardening year, visit our gardens at either site.



Recent AAS winners are: 1998

Impatiens F₁ 'Victorian Rose' – soft rose, consistently double flowers are improvements. More free flowering than other double flowers. Needs shady growing location.

Petunia F₁ 'Prisim Sunshine' – A large, creamy yellow, single flowering plant that provides color all season long, and combines well with other colors.

1999

Tritoma 'Flamenco' – a perennial in zones 5-8, this striking flower is desirable as a long stem cut flower. The tubular blooms on a flower spike can be light yellow, golden yellow, orange, red or shades of these colors. Height, 30 inches.

Verbena 'Quartz Burgundy' – a distinct deep red, burgundy wine color not previously available in an annual verbena. The large umbels and velvety texture are desirable flower qualities that were observed by the AAS judges. Another improved trait is the length of the flowering season. It will flower in the early spring or fall and continue for months. This trait is enhanced by powdery mildew tolerance so that the plant does not succumb to this disease.

Verbena 'Quartz Burgundy' – is ideal for hanging baskets as well as ground cover plantings in full sun. Spreads up to 15 inches and gets 6-10 inches in height.

Zinnia 'Profusion Cherry' – exceeded all expectations for a single flowered, mid-height garden zinnia. Once started, it never ceased flowering all through the growing season. Exhibiting a combination of high disease tolerance, and a profusion of single, rose-colored blooms, the interested gardener need only provide a sunny location, fertile soil, and water for color that will last for months. Height: 12-18 inches; width: 16-22 inches.

Zinnia 'Profusion Orange' – perhaps the most disease-resistant zinnia in North American gardens. This plant is appropriately named as the old blooms are covered with fresh foliage and more flowers. Because of its mounded habit, it shows color in all directions, so there is no “good side” for planting. Getting 12-18 inches in height, each plant will spread 14-20 inches.

Portulaca F, 'Sundial Peach' – the first portulaca to win an All-America Selections Award. It possesses two distinct qualities that other cultivars only hope for – a unique pastel coral color, and a longer display of color than other varieties of portulaca. Plants get to a height of 6-8 inches, and spread 8-12 inches.

Osteospermum 'Passion Mix' – a daisy lover's delight. The single daisy flowers can be shades of rose, purple, or a contrasting pure white. Known also as Cape Marigold or African Daisy, this native to South Africa will thrive in a xeric-type garden environment, as it needs little water to get along. They should be readily available in garden centers in 4" to 6" pots this spring. Height and width: 12-18 inches.

Marigold 'Bonanza Bolero' – unique because of its irregular bicolor design. The blooms are golden yellow, flecked with mahogany red markings in a variable pattern. The flowers can be cut and used in petite summer bouquets. This is a good candidate for our environment as it tolerates poor weather conditions quite well, and are disease and insect free. Height: 8-12 inches; width: 12-24 inches

Begonia F, 'Pin-Up® Flame' – an unusual color combination of yellow with an orange/red petal edge. This color pattern is distinct from other single flowered tuberous rooted begonias and the pattern varies slightly from plant to plant. They will be mostly available in 4 inch pots at garden centers this spring. Height and width: 10-12 inches.

Perennial Plant Association Plant of the Year 2000

Scabiosa columbaria 'Butterfly Blue'

This reliably hardy perennial for our area (zone 3) will do well in light shade or full sun, producing a mass of lavender-blue flowers through a good part of the growing season. It begins blooming from mid-spring and going to early fall if deadheaded. A good attractant for butterflies, it also makes an excellent plant for a cutflower garden or container culture. Once established, these 12-16 inch plants need little care.

Vinca 'Stardust Orchid' – performs best in full sun location, with well-drained soil. Keep the water off the plant foliage to avoid diseases. The white flowers fall off at senescence so deadheading is not unnecessary. Basically a pest-free plant that is easy to grow. Height: 14-16 inches

Tithonia 'Fiesta del Sol' – daisy-like orange flowers make a striking show in summer heat, literally ignoring the rising temperatures. This is a good butterfly and hummingbird attractant, needing only a fertile soil, full sun, and water in order to look its best. North Dakota gardeners need to be aware of this plant's sensitivity to cool temperatures – do not transplant until the temperatures are dependably warm. For gardeners who are troubled with deer grazing, this is one of the last items they will add to their menu. Height: 2-3 feet.

Cosmos 'Cosmic Orange' – if you've grown Cosmos before, don't expect this one to resemble the others in too many ways. The 2-inch orange flowers literally “glow” on the compact, dense, plant, which gets 12-18 inches tall. This is truly a low-maintenance plant that actually performs better when planted in soil of low fertility. If the spent blooms are removed, the dazzling flowers will continue their show right up 'till fall frost. To maximize flower show use either transplants or start seeds about 90 days before transplanting.

Dianthus F, 'Melody Pink' – the perfect cottage garden plant, this Dianthus serves as a colorful addition to a sunny location for the entire season, along with supplying the gardener with a supply of cut flowers. The sprays of 1-inch pink flowers will show good color despite the heat of summer. Use transplants or start seeds about 60 days before moving outside. Given sunshine, water as needed, and fertile soil, this Dianthus will reward the gardener with undemanding beauty all season long. Height: 20-24 inches.

Sunflower 'Soraya' – this imposing beauty, which stands 5-6 feet tall, has blooms that are 4-6 inches across, with distinctly orange petals and chocolate brown centers. With their long stems, they can be used as cut flowers or remain as sentinels toward the back of the garden. Direct sow the seed in a garden bed where ample sunshine can warm the soil and get the plants started. From sowing to bloom will require about 90-100 days, making it a perfect choice for a “pumpkin days” color addition to the garden.



Common Name Reference

Annuals

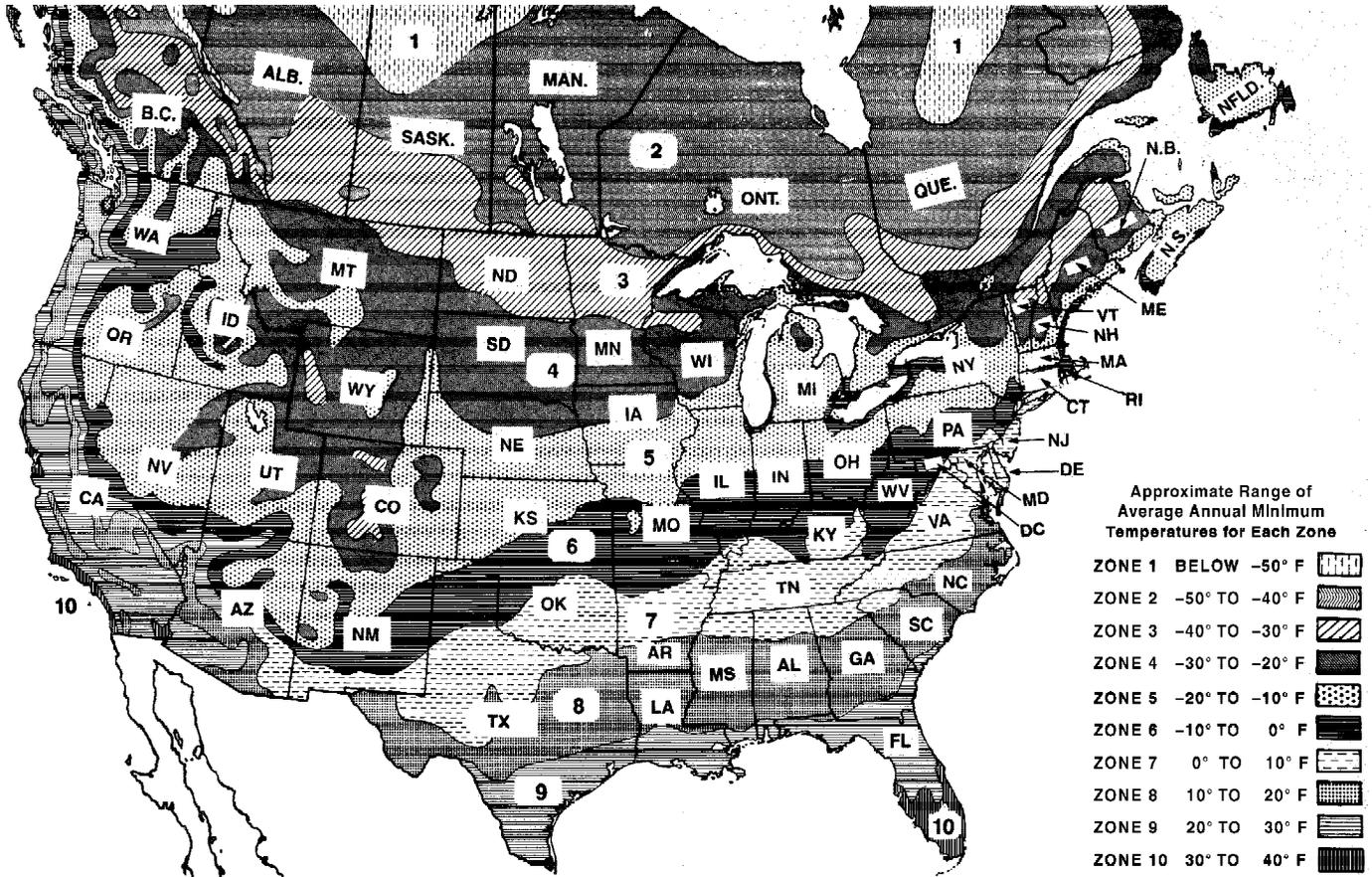
Ageratum – Floss Flower
Amaranthus – Love-lies-bleeding
Antirrhinum – Snapdragon
Begonia – Begonia
Briza – Quaking grass, Rattlesnake grass
Calendula – Calendula
Campanula – Bellflower
Celosia – Cockscomb, plumed and crested
Centaurea – Basket flower
Chrysanthemum – Chrysanthemum
Cleome – Spider flower
Coleus – Coleus, Flame nettle
Consolida – Larkspur
Coreopsis – Calliopsis
Cosmos – Cosmos
Cynoglossum – Chinese forget-me-not
Dianthus – Pink, Sweet William
Dyssodia – Dahlberg daisy
Eschscholzia – California poppy
Eustoma – Lisianthus, Prairie gentian
Gaillardia – Blanket flower
Gerbera – Transvaal daisy
Gomphrena – Globe amaranth
Gypsophila – Baby's breath
Helichrysum – Strawflower
Iberis – Rocket candytuft
Impatiens – Garden balsam
Ipomoea – Moonflower, Morning glory
Lathyrus – Sweet pea
Limonium – Statice, Sea lavender
Lobelia – Lobelia
Lobularia – Sweet alyssum
Moluccella – Bells-of-Ireland
Myosotis – Forget-me-not
Nemesia – Pouch nemesia
Nicotiana – Flowering tobacco
Nigella – Nigella, Fennel flower
Papaver – Poppy, Iceland poppy
Pelargonium – Geranium
Petunia – Petunia
Phlox – Annual phlox
Portulaca – Portulaca, moss rose
Rudbeckia – Coneflower
Salvia – Salvia, sage
Senecio – Dusty miller
Tagetes – Marigold
Tithonia – Mexican sunflower
Tropaeolum – Nasturtium
Viola – Violet, Viola, Pansy
Zinnia – Zinnia

Perennials

Achillea – Yarrow
Ajuga – Bugleweed
Alchemilla – Lady's mantle
Anaphalis – Pearly everlasting
Aquilegia – Columbine
Arabis – Rock cress
Artemisia – Wormwood
Aruncus – Goatsbeard
Astilbe – Astilbe, False spirea
Aurinia – Basket-of-gold
Boltonia – Boltonia
Campanula – Bellflower
Cerastium – Snow-in-summer
Coreopsis – Tickseed
Delphinium – Delphinium, Larkspur
Dianthus – Pink
Dicentra – Bleeding heart
Dictamnus – Gas plant
Echinacea – Purple coneflower
Erigeron – Fleabane
Gaillardia – Blanket flower
Geranium – Cranesbill
Gypsophila – Baby's breath
Heliopsis – False sunflower, oxeye
Hemerocallis – Daylily
Heuchera – Alumroot
Hosta – Plantain lily
Iris – Iris
Lamium – Dead nettle
Liatris – Blazing star, gay-feather
Ligularia – Bigleaf goldenray
Linum – Flax
Lobelia – Cardinal flower
Lychnis – Arkwright campion, rose campion
Monarda – Bee balm
Myosotis – Forget-me-not
Oenothera – Sundrops, Primrose
Paeonia – Peony
Papaver – Poppy
Perovskia – Azure sage, Russian sage
Phlox – Prairie phlox
Physotegia – Obedience, False dragonhead
Ratibida – Prairie coneflower
Rudbeckia – Coneflower, black-eyed Susan
Salvia – Sage
Scabiosa – Pincushion flower
Sedum – Stonecrop
Solidago – Goldenrod
Thymus – Thyme
Veronica – Speedwell
Viola – Violet
Yucca – Adam's needle



USDA *Plant Hardiness Zone* Map



Approximate Range of Average Annual Minimum Temperatures for Each Zone

ZONE 1	BELOW -50° F	
ZONE 2	-50° TO -40° F	
ZONE 3	-40° TO -30° F	
ZONE 4	-30° TO -20° F	
ZONE 5	-20° TO -10° F	
ZONE 6	-10° TO 0° F	
ZONE 7	0° TO 10° F	
ZONE 8	10° TO 20° F	
ZONE 9	20° TO 30° F	
ZONE 10	30° TO 40° F	



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