



Annual and Perennial Flowers for North Dakota

(Photo by Esther McGinnis, NDSU)

Revised by

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Annuals and perennials are an excellent source of color and beauty for North Dakota landscapes.

Annuals are used for their continuous flower color throughout most of the growing season. They are started anew each year. Perennials are used for their permanence in the landscape setting, offering specific periods of bloom, relatively low maintenance and wide adaptability.

Perennials usually can be divided in the spring or fall. In general, spring-blooming plants should be divided in the fall. Fall-blooming plants should be divided in the spring. Summer-blooming plants can be divided at either time. These new divisions can be replanted or given to a friend or neighbor.

Because North Dakota summers are so unpredictable, putting out transplants after killing frost threats have passed usually is a good idea.

This publication provides suggestions for flowers for specific locations in and around the landscape. These include low-growing and tall plants, and plants for shade and full-sun/dry locations, massing, attracting pollinators and fragrance.

This does not mean a plant selected for a particular location absolutely cannot grow in another type of location. This 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 to 8 inches)

- Ageratum
- Alyssum
- Dahlberg daisy
- Dianthus
- Dusty Miller
- Lobelia
- Marigolds (French or dwarf)
- Moss rose
- Nemophila
- Nierembergia
- Pansy
- Petunias (spreading) (Figure 1)
- Snapdragons (dwarf)
- Vinca (spreading)
- Zinnia (dwarf)

Intermediate (10 to 20 inches)

- Angelonia (Figure 2)
- Begonia (wax)
- Gaillardia
- Gomphrena
- Geranium
- Impatiens
- Marigold
- Petunia
- Salvia (*S. splendens*)
- Verbena
- Vinca
- Zinnia (*Z. angustifolia*)

Tall (24 to 48-plus inches)

- Cannas
- Celosia (Figure 3)
- Cleome
- Cosmos
- Fountain grass
- Gaura
- Marigold (American or African)
- Nicotiana
- Snapdragon
- Statice
- Zinnia (*Z. elegans*)

A listing of scientific and common names is on the back cover.

Figure 1. Spreading petunias are used effectively in the front of this landscape bed.

(Esther McGinnis, NDSU)

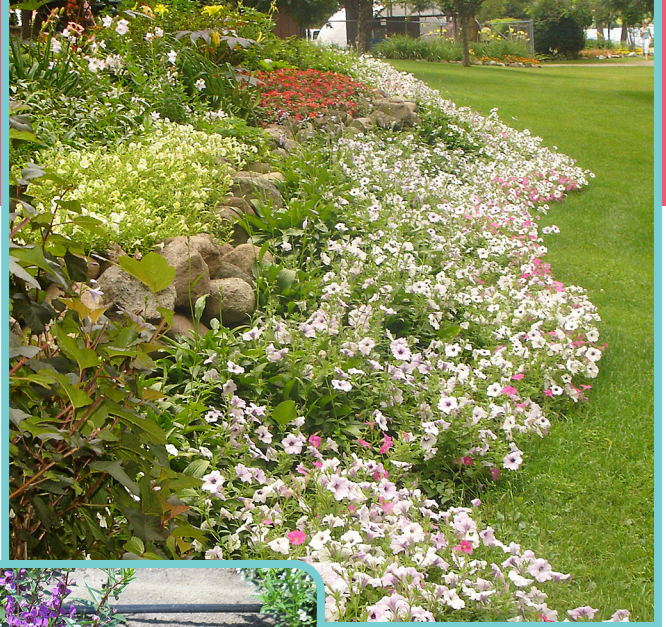


Figure 2. Angelonias are a great medium-height plant.

(Esther McGinnis, NDSU)



Figure 3. Celosia adds color and height to the garden.

(Esther McGinnis, NDSU)



Figure 4. Coleus leaves brighten the shade.

(Esther McGinnis, NDSU)

Plants for Shade

- Begonia (wax and tuberous)
- Browallia
- Caladium
- Coleus (Figure 4)
- Dahlberg daisy (light shade)
- Impatiens (Standard and New Guinea)
- Lobelia (light shade)
- Myosotis (forget-me-not)
- Nemesia (light shade)
- Nemophila (light shade)
- Nicotiana (light shade)
- Nigella
- Pansy
- Poppy (light shade or east side)
- Torenia (light shade)

Full Sun/Dry Locations

- Calendula
- California poppy
- Celosia
- Cleome
- Dusty Miller (*Senecio*)
- Gaillardia
- Lantana
- Lisianthus (*Eustoma*)
- Moss rose (*Portulaca*)
- Rudbeckia (Figure 5)
- Statice (*Limonium*)
- Sanvitalia
- Tithonia (Mexican sunflower)
- Verbena
- Vinca

Striking Flower Show – Massed Plantings

- Alyssum
- Cannas
- Dianthus
- Dahlberg daisy
- Geranium
- Marigold
- Moss rose (*Portulaca*)
- Petunia
- Salvia
- Snapdragon
- Verbena
- Zinnia

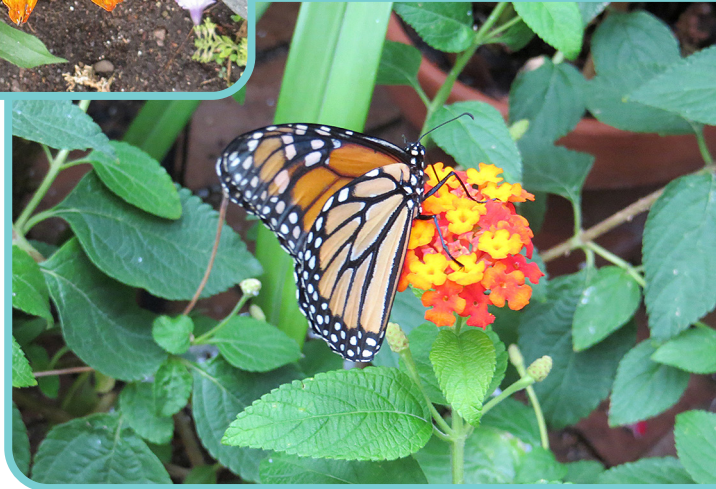


Figure 5. Annual forms of *Rudbeckia* are very striking.

(Esther McGinnis, NDSU)

Figure 6. Lantana attracts butterflies.

(Esther McGinnis, NDSU)



Annual Plants for Attracting Pollinators

- Alyssum
- Cleome
- Cosmos
- Lantana (Figure 6)
- Marigold
- Pentas
- Salvia
- Sunflower
- Verbena
- Zinnia

Annuals Planted for Fragrance

- Agastache
- Alyssum
- Four-o'clock
- Heliotrope
- Lavender
- Mignonette
- Moonflower (vine)
- Nasturtium
- Nicotiana
- Pincushion flower
- Scented geranium
- Stock
- Sweet pea

Annuals for Drying

- Amaranthus (*A. caudatus*)
- Celosia
- Fountain grass (*Pennisetum* sp.)
- Gomphrena
- Salvia (*S. farinacea*)
- Statice
- Strawflower

Vining Annuals

- Black-eyed Susan vine (*Thunbergia*)
- Cup and saucer vine (*Cobaea*)
- Morning glory (*Ipomoea*)
- Purple hyacinth bean (*Lablab*)
- Sweet pea

Good for Cut Flowers

- Dahlias
- Dianthus
- Fountain grass (*Pennisetum*)
- Gladiolus
- Gomphrena
- Lisianthus
- Snapdragons (Tall)
- Statice
- Sunflower
- Zinnia (*Z. elegans*)

Perennials

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

Wet areas could be planted with *Iris sibirica*, *Monarda didyma*, *Chelone lyonii* or *Viola odorata*. For dry areas, consider using yarrow (*Achillea*) or daylilies (*Hemerocallis*).

Where the soil is poor, blue false indigo (*Baptisia australis*) could be used.

For tall background plantings, consider *Phlox paniculata* or *Boltonia asteroides* 'Snowbank.' Naturalized plantings may use prairie gayfeather (*Liatris pycnostachya*) or purple coneflower (*Echinacea purpurea*), while rocky areas will accommodate plantings of columbine (*Aquilegia canadensis*) and basket-of-gold (*Aurinia saxatilis* 'Citrina').

Borders can be accented effectively with snow-in-summer (*Cerastium tomentosum*) or moss pink (*Phlox subulata*).

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

Figure 7. The pink spires of astilbe light up the shade.

(Esther McGinnis, NDSU)



Figure 8. Turtlehead (*Chelone lyonii*) does well in moist to wet soils in partial shade.

(Esther McGinnis, NDSU)



Figure 9. Coreopsis adds cheer to the garden with its yellow flowers.

(Esther McGinnis, NDSU)



Figure 10. *Echinacea* 'White Swan' brightens a garden.

(Esther McGinnis, NDSU)

Figure 11. Delphinium brings height and a vivid blue to the landscape. (Esther McGinnis, NDSU)



Perennials

Figure 12. Aquilegia comes in different colors.

(Esther McGinnis, NDSU)



Color Guide

Blue to Purple

Ajuga
Aquilegia
Campanula
Delphinium
Echinacea
Hosta
Iris
Liatrix
Nepeta
Phlox
Platycodon
Salvia nemorosa
 'Blue by You'
Scabiosa
Symphotrichum (aster)
Veronica
Viola

Pink to Red

Achillea millefolium
Astilbe (Figure 7)
Boltonia
Chelone lyonii (Figure 8)
Dianthus
Dicentra
Echinacea
Erigeron
Geranium
Hemerocallis
Heuchera
Hylotelephium spectabile
Iris
Lobelia cardinalis
Lychnis calcedonica
Paeonia
Phlox
Physostegia
Salvia nemorosa
 'Rose Marvel'
Symphotrichum (aster)

Gray to Blue, and Variegated Foliage

Achillea
Ajuga
Artemisia
Cerastium
Dianthus
Echinops
Heuchera
Hosta
Lamium
Nepeta
Sedum
Thymus

Yellow to Orange

Achillea
 'Coronation Gold'
Alchemilla
Aurinia saxatilis
Coreopsis (Figure 9)
Gaillardia
Hemerocallis
Heliopsis
Iris
Ligularia
Linum flavum
Oenothera
Papaver orientale
Ratibida
Rudbeckia
Sedum
Solidago

White

Achillea 'Angels Breath'
Arabis albida
Aruncus
Astilbe
Boltonia
Cerastium
Dianthus
Dicentra
Dictamnus
Echinacea (Figure 10)
Hosta
Iris
Leucanthemum
Paeonia
Phlox
Symphotrichum (aster)
Veronica
Yucca

Season of Bloom

May to June

Ajuga
Cerastium
Dicentra
Dictamnus
Erigeron
Geranium
Iris
Lychnis calcedonica
Paeonia
Viola

June to July

Allium
Aruncus
Baptisia
Campanula
Delphinium (Figure 11)
Heuchera
Salvia 'Rose Queen'

July to August

Achillea 'Angels Breath'
Ligularia
Lobelia cardinalis
Monarda
Physostegia
Ratibida

August to September

Boltonia
Hylotelephium spectabile
Symphotrichum (aster)

Extended Season of Bloom

Achillea millefolium
Aquilegia (Figure 12)
Coreopsis
Echinacea
Dianthus
Gaillardia
Heliopsis
Hemerocallis
Hosta
Liatrix
Linum flavum
Oenothera
Phlox
Rudbeckia
Sedum
Solidago
Veronica

Perennials

Foliar Impacts

Gray, Blue and 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

Figure 13. Tall sedums bloom in late summer and grow 12 to 24 inches tall.

(Esther McGinnis, NDSU)

Heights

Less than 12 inches

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

12 to 24 inches

Achillea
Arum
Asarum
Campanula rotundifolia
Coreopsis auriculata 'Nana'
Dendranthemum
Dianthus barbatus
Dictamnus albus
Erigeron 'Walther'
Geranium
Heuchera sanguinea
Hosta lancifolia
Hylotelephium spectabile
(Figure 13)
Iris, Bearded
Linum perenne
Lychnis X arkwrightii
Paeonia tenuifolia
Phlox divaricata
Sedum aizoon
Veronica 'Crater Lake Blue'
Veronica spicata



More than 24 inches

Achillea filipendulina
Aquilegia canadensis
Aster
Astilbe
Baptisia (Figure 14)
Boltonia asteroides 'Snowbank'
Coreopsis 'Golden Showers'
Delphinium elatum
Dictamnus albus 'Purpureus'
Echinacea purpurea
Echinops vitro
Eryngium amethystinum
Hosta sieboldiana

Iris
Liatris spicata
Lychnis chalconica
Monarda didyma
Papaver orientale
Phlox paniculata
Physostegia virginiana
Rudbeckia
Salvia
Solidago 'Gold Dwarf'
Veronica virginica
Yucca



Figure 14. *Baptisia* cultivars bloom in June and add height to the garden. (Esther McGinnis, NDSU)



NDSU is an All-America Selections Display Garden (Esther McGinnis, NDSU)



Allium 'Millenium' was the 2018 Perennial Plant Association's Plant of the Year. (Esther McGinnis, NDSU)

All-America Selection (AAS) Winners

All-America Selections is an independent, nonprofit organization that tests new varieties of annuals and vegetables across the U.S. Each year, All-America Selections winners are announced. Interested gardeners should consider using these cultivars in their plant selections, whether these are current winners or winners from previous years.

These are the most extensively tested herbaceous plants in North America. NDSU has two AAS demonstration gardens: one on the campus in Fargo and the other at the Williston Research Extension Center. There, you can observe just how well these selections are doing under "normal" care.

For more information on All-America Selection winners, go to www.all-americaelections.org.

The Perennial Plant of the Year

The Perennial Plant of the Year (POY) program began in 1990 to showcase a perennial that is a standout among its competitors. Perennials chosen are suitable for a wide range of growing climates, require low maintenance, have multiple-season interest and are relatively pest/disease-free. If you are looking for an excellent perennial for your next landscape project or something reliable for your gardens, check out the Perennial Plant of the Year archive list at <https://perennialplant.org/page/PastPPOY>. More information about other perennials can be found in the Plant Database.

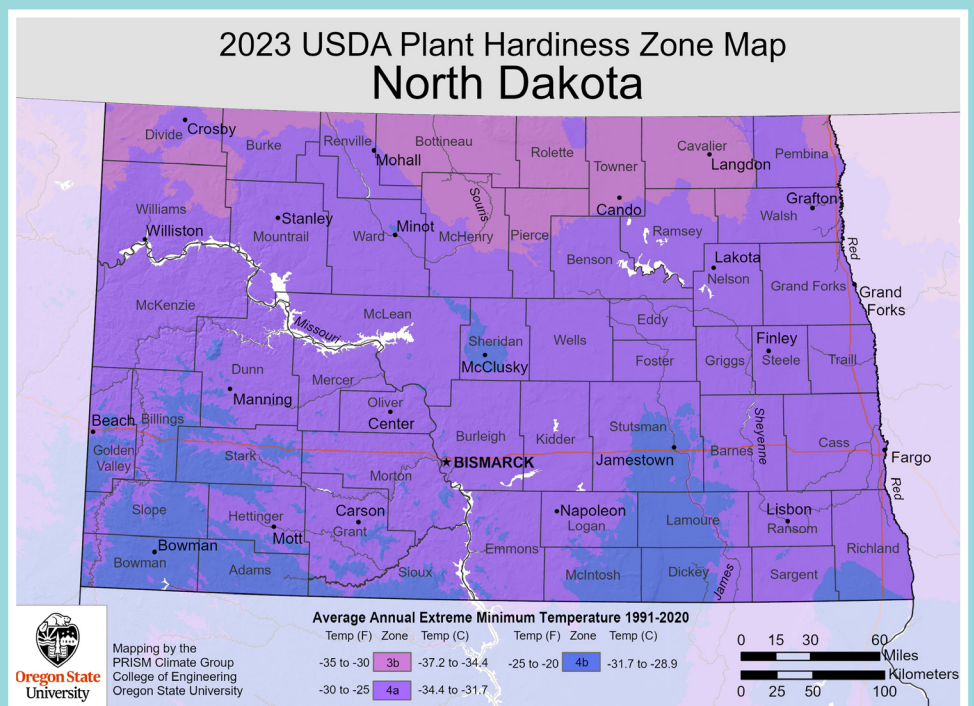
USDA Plant Hardiness Zone Map

The U.S. Department of Agriculture's Plant Hardiness Zone Map (Figure 15) provides guidance for planting perennials. The vast majority of North Dakota is in zone 4. Gardeners in zone 4 should look for perennials that are hardy to zone 4 or a lower number.

Northern sections of the state are in zone 3. Gardeners there should purchase perennials that are hardy to zone 3 or lower. Hardiness zones are indicated on the plant label.

Gardeners who live near the boundary of zone 4 and 3 should be more conservative and purchase zone 3 plants.

Figure 15. The USDA Plant Hardiness Zone Map is based on the 30-year average of the lowest winter temperature for the years 1991-2020.



Common Name Reference

Annuals

Ageratum — Floss flower
Amaranthus — Love-lies-bleeding
Antirrhinum — Snapdragon
Begonia — Begonia
Briza — Quaking grass, rattlesnake grass
Calendula — Calendula
Campanula — Bellflower
Catharanthus — Annual vinca
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
Helichrysum — Strawflower
Iberis — Rocket candytuft
Impatiens — Garden balsam
Ipomoea — Moonflower, morning glory
Lantana — Shrub verbena
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
Allium — Ornamental onion
Anaphalis — Pearly everlasting
Aquilegia — Columbine
Arabis — Rock cress
Artemisia — Wormwood
Aruncus — Goatsbeard
Astilbe — Astilbe, false spirea
Aurinia — Basket-of-gold
Baptisia — False indigo
Boltonia — Boltonia
Campanula — Bellflower
Cerastium — Snow-in-summer
Chelone — Turtlehead
Coreopsis — Tickseed
Delphinium — Delphinium, larkspur
Dendranthemum — Garden mum
Dianthus — Pink
Dicentra — Bleeding heart
Dictamnus — Gas plant
Echinacea — Purple coneflower
Erigeron — Fleabane
Eryngium — Sea holly
Gaillardia — Blanket flower
Geranium — Cranesbill
Gypsophila — Baby's breath
Heliopsis — False sunflower, oxeye
Hemerocallis — Daylily
Heuchera — Alumroot
Hosta — Plantain lily
Hylotelephium — Tall sedum
Iris — Iris
Lamium — Dead nettle
Leucanthemum — Shasta daisy
Liatris — Blazing star, gayfeather
Ligularia — Bigleaf goldenray
Linum — Flax
Lobelia — Cardinal flower
Lychnis — Arkwright campion, rose campion
Monarda — Bee balm
Myosotis — Forget-me-not
Nepeta — Catmint
Oenothera — Sundrops, primrose
Paeonia — Peony
Papaver — Poppy
Perovskia — Azure sage, Russian sage
Phlox — Prairie phlox
Physotegia — Obedient plant, false dragonhead
Ratibida — Prairie coneflower
Rudbeckia — Coneflower, black-eyed Susan
Salvia — Sage
Scabiosa — Pincushion flower
Sedum — Stonecrop
Solidago — Goldenrod
Symphyotrichum — Aster
Thymus — Thyme
Veronica — Speedwell
Viola — Violet
Yucca — Adam's needle

This publication was authored by Barb Laschkewitsch, NDSU agricultural research specialist, and Ron Smith, retired NDSU Extension horticulturist.

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