

## An identification guide to Native Pollinator Plants of South Dakota for Managed Landscapes

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## How to choose plants

Native perennials are an excellent addition to any garden. Once established, perennials return year after year without replanting. When choosing plants to incorporate into a garden, consider plants that are native to South Dakota. These plants are better adapted to the local climate and soils. Not only are native perennials visually appealing, but these plants are also important pollen and nectar sources for pollinators. Pollinators are any organism that moves pollen from flower to flower. Plants that are not capable of self-fertilization need pollinators in order to reproduce.

The plants in this guide were chosen because they are used by pollinators found in South Dakota (including insects such as solitary bees, bumble bees, butterflies, hover flies just to name a few). In addition to providing pollen and nectar, some of these native perennials are hosts for the caterpillars of native butterflies.

When gardening for pollinators, aim to choose plants that differ in bloom size, shape, color, and period. Select plants that fit with your soil type, light availability, and watering habits.

Native perennial plants may be unavailable or hard to find in local greenhouses, but seed and plugs can be obtained from specialty native plant retailers. Do not remove plants from wild prairie habitats.

There are cultivars available for some native perennials, but planting the straight species is preferred. Cultivars are bred for traits attractive to people, and do not necessarily possess the same quantity and quality of floral resources required by pollinators.

## **Bloom periods**

This chart shows the approximate bloom times for the native perennial plants in this guide. Bloom times were determined from observations in central South Dakota and published sources. Since South Dakota contains multiple plant hardiness zones and numerous microclimates, bloom times in your area may vary.

To better support pollinators, make sure there is some plant in bloom at all times up until frost.

	May	June	July	Aug	Sept	Oct
Buffalo bean						
Prairie violet						
Sweet William						
Foxglove beardtongue						
Wild columbine						
Showy beardtongue						
Textile onion						
Bee balm						
Butterfly weed						
Swamp milkweed						
Wild licorice						
Lead plant						
Purple prairie clover						
Hoary vervain						
Stiff sunflower						
Anise hyssop						
Black Samson						
Purple coneflower						
Aromatic aster						
Dotted gayfeather						
Heath aster						
Smooth blue aster						

## Buffalo bean Astragalus crassicarpus

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-3 ft tall

Flower color: purple

Soil: dry to moist soil

Sun: full sun to shade

Notes: Host for Afranius Duskywing (Erynnis afranius) caterpillars.

#### Foxglove beardtongue

(Smooth white beardtongue, talus slope penstemon) **Penstemon digitalis** 

#### **Bloom period**

Мау	June	July	Aug	Sept	Oct



Height: 2-3 ft tall

Flower color: white or pink

Soil: well-drained soil

Sun: full sun to part shade

**Notes:** Attracts bumble bees. 'Husker Red' is a commonly available cultivar with maroon foliage.

#### Large beardtongue Penstemon grandiflorus

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-3 ft tall

Flower color: purple

Soil: sandy soil

Sun: full sun

Notes: Attractive to bumble bees.

## Prairie (birdsfoot) violet

Viola pedatifida

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 0.5 - 1 ft tall

Flower color: purple

Soil: well-drained soils

Sun: full sun

**Notes:** Host for regal fritillary *(Speyeria idalia)* caterpillars. May rebloom in the fall.

## Early Season Sweet William, wild blue phlox Phlox divaricata

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-2 ft tall

Flower color: blue to purple

Soil: well-drained soils

Sun: part to full shade

**Notes:** Visited by insects with mouthparts long enough to reach the nectar at the bottom of the phlox's tubular flowers. Attracts butterflies. Bumble and carpenter bees are known to chew a hole at the base fo the flower to steal nectar.

## Textile onion Allium textile

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 6 in. tall

Flower color: white

Soil: dry soil

Sun: full sun

**Notes:** Good nectar source. This plant can be delicate – it will not outcompete its neighbors.

## Wild (red) columbine

#### Aquilegia canadensis

#### Bloom period

May	June	July	Aug	Sept	Oct



#### Height: 1-3 ft tall

#### Flower color: red

Soil: well-drained soil that is not too rich

Sun: part to full shade

**Notes:** Visited by insects with long mouthparts, like butterflies and some moths (hawk moths in particular) as well as hummingbirds. Exposure to full sun will stunt its growth and burn the foliage.

## Mid-season

## Leadplant Amorpha canescens

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-3 ft tall

Flower color: purple

Soil: well-drained soils

Sun: full sun to partial shade

**Notes:** Good nectar source. Drought tolerant. Bright orange pollen is easily observed on foraging honey and bumble bees.

## Mid-season

#### **Purple prairie clover**

#### Dalea purpurea

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-3 ft tall

Flower color: purple

Soil: well-drained soils

Sun: full sun

**Notes:** Drought tolerant. Host for dog face butterfly (*Zerene cesonia*) caterpillars. Bright orange pollen is easily observed on foraging honey and bumble bees.

## Mid-season

## Wild (American) licorice

Glycyrrhiza lepidota

#### Bloom period

May	June	July	Aug	Sept	Oct



Height: 1-3 ft tall

Flower color: pink to lavender

Soil: moist soil and tolerates heavy clay soils

Sun: partial shade to full shade

**Notes:** Good nectar source. Host for silver-spotted skipper *(Epargyreus clarus)* caterpillars.

# Mid to late season Anise (blue giant) hyssop

Agastache foeniculum

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 2-4 feet tall

Flower color: blue to purple

Soil: well-drained soils

Sun: full sun

**Notes:** Member of the mint family. Easy to grow, spreads readily. Drought tolerant. Leaves release an anise scent when crushed.

#### Bee balm

#### (Wild bergamot) *Monarda fistulosa*

#### **Bloom period**

May	June	July	Aug	Sept	Oct



#### Height: 2-4 ft tall

Flower color: lavender, pink, white or many shades of purple

Soil: well-drained soils

Sun: full sun

**Notes:** Excellent nectar source for bumble bees. Member of the mint family – generally easy to grow. Susceptible to powdery mildew, but this can be managed by ensuring good air flow around the plants, and planting in areas with good drainage. The powdery mildew-resistant cultivar 'Marshalls Delight' is available.

## **Black Samson**

(Narrow-leaf coneflower) *Echinacea angustifolia* 

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-2 feet tall

Flower color: pink to lavender

Soil: dry

Sun: full sun to part shade

Notes: Tolerates drought and alkaline soils. Performs well in cultivation.

#### **Butterfly weed**

(orange milkweed) Asclepias tuberosa

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1.5-2 ft tall

Flower color: orange

Soil: well-drained soils

Sun: full sun

**Notes:** Drought tolerant. Host for monarch butterfly (*Danaus plexippus*) caterpillars. This milkweed fits in well with more structured or formal plantings.

## **Dotted gayfeather**

Liatris punctata

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-2 feet tall

Flower color: pink to lavender

Soil: well-drained soils

Sun: full sun

Notes: Tolerant of drought and alkaline soils. Attracts butterflies.

## Hoary vervain Verbena stricta

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 2-4 ft tall

Flower color: pink to lavender

Soil: dry, tolerates sandy soil

Sun: full sun

Notes: Good nectar source for bees and butterflies.

## **Purple coneflower**

#### Echinacea purpurea

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 2-4 ft tall

Flower color: purple flower with orange center

Soil: well-drained soils

Sun: full sun

**Notes:** Perhaps the most widely available native perennial. Numerous cultivars available, but plant the straight species when possible.

#### **Stiff sunflower** *Helianthus pauciflorus*

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 3-6 ft tall

Flower color: yellow

Soil: well-drained soils

Sun: full sun

Notes: Host for gorgone checkspot (Chlyosyne gorgone carlota) caterpillars.

#### Swamp milkweed

#### Asclepias incarnata

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 3-5 ft tall

Flower color: pink

Soil: moist to wet soil, tolerates clay

Sun: full sun

Notes: Host for monarch butterlfy (Danaus plexippus) caterpillars.

#### Late season

#### **Aromatic aster**

# (wild blue star, fall aster) *Symphyotrichum oblongifolium*

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-2 feet tall

Flower color: purple

Soil: well-drained soil

Sun: full sun to part shade

Notes: Numerous late season blooms that attract many different bees.

#### Late season

## Heath aster Symphyotrichum ericoides

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 1-3 feet tall

Flower color: white

Soil: dry

Sun: full sun

**Notes:** Tolerant of drought and alkaline soils. Host for pearl crescent (*Phyciodes tharos*) caterpillars. Flowers are smaller than those of smooth blue and aromatic aster.

#### Late season

## Smooth blue aster Symphyotrichum laeve

#### **Bloom period**

May	June	July	Aug	Sept	Oct



Height: 2-4 feet tall

Flower color: lavender-blue or purple

Soil: low to medium wet soil

Sun: full sun

**Notes:** Host for pearl crescent *(Phyciodes tharos)* caterpillars. Numerous late season blooms that attract many different bees.

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#### References

- Marrone, G. M. Field Guide to Butterflies of South Dakota.
- Native Plant Information Network. Lady Bird Johnson Wildflower Center.

#### Photographs

Agastache foeniculum, Allium textile, Amorpha canescens, Asclepias incarnata, Asclepias tuberosa, Astragalus crassicarpus, Dalea purpurea, Echinacea angustifolia, Glycyrrhiza lepidota, Helianthus pauciflorus, Liatris punctata, Penstemon digitalis, Penstemon grandifloras, Verbena stricta, Viola pedatifida, Symphotrichum ericoides by Amanda Bachmann

Aquilegia canadensis, Monarda fistulosa, Phlox divaricata, Symphyotrichum laeve, Symphyotrichum oblongifolium by Adam Varenhorst

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