

# Plants (Vascular)

The Great Plains Flora Association's "Atlas of the Flora of the Great Plains" lists over six hundred species and varieties of vascular plants that occur in the counties of Day, Grant, Marshall and Roberts of northeast South Dakota. It would be impractical for a guide like this to list every one of these plants. Listed and shown below are just a few of the hundreds of species growing on the areas tallgrass prairies, woodlands, and aquatic habitats that the casual observer or naturalist can identify in the field with little knowledge of plant taxonomy. The majority of the plant species listed in this publication are depicted in several field guides written for this area. Those interested in pursuing a greater knowledge of plant identification and taxonomy will need to study Harris (1997) and utilize the plant identification manuals listed on page 20.

The scientific names of plants frequently change and common names vary from region to region. The nomenclature used here is from the most recent field guides and manuals available for South Dakota as follows; Moyle (2001), Johnson and Larson (1999), Larson (1993), and Great Plains Flora Association (1991).

This list is compiled from observations and collections of the author and Dave Ode - SD Dept. Game, Fish, and Parks Botanist, and species listed as occurring in the area by Larson (1993), Van Bruggen (1976), and the Great Plains Flora Association (1977).

Plants Observed in Day, Grant, Marshall, and Roberts Counties, South Dakota.

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## ❖ Tallgrass Prairie Wildflowers and Grasses



Native tallgrass prairie near Blue Dog Lake (photo by Dennis Skadsen)

Some of the largest contiguous tracts of native tallgrass prairie remaining in the state are found in northeast South Dakota. What you'll find is largely dependant on how these prairies are managed.

On overgrazed native pastures, you may only find plant species tolerant of grazing. Many forbs, like the purple coneflower, decrease with grazing pressure due to the fact cattle apparently like the taste or possibly need the nutrients, vitamins, and other compounds these plants may provide. Some species, like the goldenrods, actually increase with grazing pressure as other species disappear. These plants are not as palatable to livestock and thrive as competition with other species decrease. Many landowners, especially in the Crandall-Crocker Hills of western Day County, have implemented grazing rotations that strive to protect the diversity of plants and animals on native tallgrass prairies.

By rotating the time of year these pastures are grazed and allowing rest periods with no grazing, many of the plant species that typically disappear with grazing pressure are preserved.

Prairies managed by fall haying have some of the most diverse plant communities. Some of the best hay prairies are located on tribal trust lands managed by the Sisseton Wahpeton Oyate. The diversity of these prairies is important to tribal members who utilize native forbs and grasses for ceremonial and medicinal purposes.

Many native tallgrass prairies owned by state and federal agencies are being managed to improve the diversity and abundance of native flora and fauna. Prairie remnants at Hartford Beach State Park and Pickerel Lake State Recreation Area are good examples that are readily accessible to the public. Prescribed fire, fall haying, and shrub control have been implemented at these sites in efforts to preserve floristic diversity and abundance. Remember it is illegal to disturb or remove plants and animals from state and federal property.

### Native Grasses

*Andropogon gerardii* **Big bluestem**  
*Bouteloua curtipendula* **Sideoats grama**  
*Bouteloua gracilis* **Blue grama**  
*Bouteloua hirsute* **Hairy grama**  
*Buchloe dactyloides* **Buffalograss**  
*Calamovilfa longifolia* **Prairie sandreed**  
*Elymus canadensis* **Canada wildrye**  
*Elymus trachycaulus* **Slender wheatgrass**  
*Koeleria macrantha* **Junegrass**  
*Panicum virgatum* **Switchgrass**  
*Pascopyrum smithii* **Western wheatgrass**  
*Phalaris arundinacea* **Reed canarygrass**  
*Schizachyrium scoparium* **Little bluestem**  
*Sorghastrum nutans* **Indiangrass**  
*Spartina pectinata* **Prairie cordgrass**  
*Sporobolus heterolepis* **Prairie dropseed**  
*Stipa comata* **Needleandthread**  
*Stipa spartea* **Porcupine grass**

*Stipa viridula* **Green needlegrass**

### Wildflowers



Blanket flowers (photo by Dennis Skadsen)

Obviously the best and most enjoyable times to observe wildflowers are during the season in which they are in bloom. In northeast South Dakota the majority of our native prairie forbs blossom from mid-June through early September. These are the warm season species that take advantage of cool wet springs to develop and mature during the usually warm dry days of summer. The majority of these warm season species are in bloom by early July. These include some of the showiest and easiest species to identify; yarrow, leadplant, yellow evening primrose, prairie clovers, coneflowers, and the wild lily. As these species fade by late July, whole new sets of plants begin to color the prairie. By late August the milkweeds, goldenrods, asters, gentians, and gayfeathers are in bloom. During May and early June the cool season forbs and grasses appear. One of the first wildflowers to bloom in the spring is the pasqueflower, followed in late May and early June by blue-eyed grasses, prairie smoke, prairie violets, and puccoons. Listed and shown below are some of the more common wildflowers found on northeast South Dakota's tallgrass prairies.

*Achillea millefolium* **Common yarrow**  
*Allium cernuum* **Nodding onion**  
*Allium stellatum* **Prairie onion, Pink wild onion**  
*Allium textile* **Textile onion**  
*Amorpha canescens* **Leadplant**  
*Anemone canadensis* **Canada anemone,  
 Meadow anemone**  
*Anemone cylindrica* **Thimbleflower**



Pasqueflower (photo by Dennis Skadsen)

*Anemone patens* **Pasqueflower**

Our state flower is one of the earliest blooming wildflowers. Flowers can appear as early as late March (often covered by snow) through mid-May. This species can tolerate and even proliferate in overgrazed prairies.

*Apocynum sibiricum* **Prairie dogbane**  
*Artemisia frigida* **Fringed sagewort**



Regal fritillaries nectaring on common milkweed (photo by Dennis Skadsen)

*Asclepias ovalifolia* **Prairie milkweed**  
*Asclepias speciosa* **Showy milkweed**  
*Asclepias syriaca* **Common milkweed**  
*Asclepias verticillata* **Whorled milkweed**  
*Asclepias viridiflora* **Green milkweed**

Milkweeds are named after the white sap found in their leaves and stems. The sap contains glycosides, a chemical substance poisonous to animals. Several insects that feed on milkweed plants, the most familiar being the Monarch butterfly, have developed immunity to glycosides and have incorporated this chemical into their bodies. This makes insects like the Monarch unpalatable or poisonous to predators.

One species of milkweed, the Woolly milkweed (*Asclepias lanuginosa*), shown below, has not been collected in northeast South Dakota since the early 1970s. Historical records exist of plants collected near Bitter and Blue Dog Lakes in Day County, and near Sica Hollow in

Marshall County. The woolly milkweed may now be extirpated from northeast SD.



Woolly milkweed (photo by Dave Ode)



New England aster (photo by Dennis Skadsen)

*Aster ericoides* **Heath aster**  
*Aster novae-angliae* **New England aster**  
*Aster oblongifolius* **Aromatic, Prairie aster**

*Aster sagittifolius* **Arrow-leaved aster**  
*Aster sericeus* **Silky aster**  
*Astragalus absurgens* **Standing milkvetch**  
*Astragalus agrestis* **Field milkvetch**  
*Astragalus crassicaarpus* **Prairie plum, Groundplum milkvetch**  
*Calylophus serrulatus* **Toothed-leaved evening primrose, Yellow evening primrose**  
*Castilleja sessiliflora* **Downy paintbrush**  
*Cerastium arvense* **Prairie chickweed**  
*Chrysopsis villosa* **Hairy goldaster**  
*Comandra umbellata* **Bastard toadflax**



Purple pincushion (photo by Dennis Skadsen)

*Coryphantha vivipara* **Purple pincushion**

The only cactus found in northeast South Dakota occurs on dry native prairie hilltops with sandy soils. Because of the plants low profile and surrounding taller vegetation, it is hard to observe and is often overlooked except when in bloom. Plants flower from late May through mid-June. This cactus apparently does not tolerate over-grazing and is considered an indicator of good prairie health and diversity.

Another species, the brittle prickly pear cactus, grows on the granite outcrops found along the Minnesota River located in the Big Stone

National Wildlife Refuge just a few miles downstream of Big Stone Lake in Grant County.

the S.D. Dept. of Game, Fish, and Park's Natural Heritage Program staff.



Small white lady's slipper (Photo by Dennis Skadsen)

*Cypripedium candidum* **Small white lady's slipper**

This small rare orchid grows in low wet native prairies, often near the edges of wetlands and fens. Much of the native prairie habitat this species favors has been converted to cropland. Prairies where this orchid occurs should be protected. One of the largest populations of small white lady's slippers occurs on a native hayfield in Roberts County that, because of its occurrence, has been protected from conversion to cropland by the landowner. Lady's slippers bloom from late May through mid-June. Populations of this orchid should be reported to

- Dalea candida* **White prairie clover**
- Dalia purpurea* **Purple prairie clover**
- Delphinium virescens* **Prairie larkspur**



Purple Coneflower (photo by Dennis Skadsen)

*Echinacea angustifolia* **Purple coneflower**

This wildflower, which blooms in early July, is well known by ethno-botanists for its medicinal qualities. Kindscher (1992) reported the purple coneflower was the most widely used medicinal plant of the Plains Indians. Many people purchase echinacea extracts as a preventative for colds, although science has not conclusively shown any benefits from the plant for this ailment. Scientists however, are investigating the plant for compounds useful in developing antibiotics, anti-cancer drugs, and insecticides.

Unfortunately, the purple coneflower is one species that does not tolerate grazing pressure. This plant decreases or disappears altogether from grazed pastures, quite possibly because livestock like its taste or benefit from some of the same medicinal properties being studied by scientists.

- Erigeron strigosus* **Rough fleabane, Daisy fleabane**
- Gaillardia aristata* **Blanket flower**
- Gaura coccinea* **Scarlet gaura**



Closed gentian (photo by Dennis Skadsen)

- Gentiana andrewsii* **Closed gentian**
- Gentiana puberulenta* **Downy gentian**

Two of our showiest wildflowers: the downy gentian is found on drier upland prairie sites while the closed or bottle gentian is found on wet prairies. The flowers of the closed gentian can only be pollinated by bumblebees that are strong enough to push the petals apart to reach the stamens.

Both gentians are indicators of high quality prairie and may become extirpated due to overgrazing or a lack of disturbance like fire or haying. These two flowers bloom in late summer from August through September.



Downy gentian (photo by Dennis Skadsen)

- Geum triflorum* **Purple Avens, Prairie smoke**
- Glycyrrhiza lepidota* **American licorice**
- Grindelia squarrosa* **Gum plant, Curlycup gumweed**
- Helianthus maximilianii* **Maximilian sunflower**
- Helianthus pauciflorus* **Stiff sunflower**
- Heliopsis helianthoides* **Ox-eye**
- Heuchera richardsonii* **Alum root**



Prairie smoke (photo by Dennis Skadsen)

*Hypoxis hirsuta* **Yellow star grass**  
*Kuhnia eupatorioides* **False boneset**



Monarch on rough gayfeather (photo by Dennis Skadsen)

*Liatris aspera* **Rough gayfeather**  
*Liatris punctata* **Dotted gayfeather**  
*Liatris pycnostachya* **Tall blazing star, Prairie blazing star**



Wild lily (photo by Dennis Skadsen)

*Lilium philadelphicum* **Wild lily**  
*Lithospermum canescens* **Hoary puccoon**  
*Lithospermum incisum* **Fringed puccoon**  
*Lobelia spicata* **Pale-spike lobelia**  
*Lygodesmia juncea* **Rush skeleton plant**  
*Monarda fistulosa* **Wild bergamot**  
*Oenothera biennis* **Common evening primrose**  
*Onosmodium molle* **False gromwell**  
*Oxalis violacea* **Violet wood sorrel**  
*Oxytropis lambertii* **Locoweed, Lambert crazyweed**  
*Pedicularis canadensis* **Common lousewort, Wood betony**  
*Penstemon albidus* **White beardtongue**  
*Penstemon gracilis* **Slender penstemon**



Large flowered penstemon (photo by Dennis Skadsen)

*Penstemon grandiflorus* **Large flowered penstemon, Shell-leaf penstemon**  
*Polygala alba* **White milkwort**  
*Potentilla arguta* **Tall cinquefoil**

*Pediomelum argophyllum* **Silver-leaved psoralea, Silverleaf scurfpea**



Dusted skipper nectaring on prairie turnip (photo by Dennis Skadsen)

*Pediomelum esculentum* **Prairie turnip, Breadroot scurfpea**



Prairie coneflower (photo by Dennis Skadsen)

*Ratibida columnifera* **Prairie coneflower**  
*Rosa arkansana* **Prairie rose**  
*Rudbeckia hirta* **Blackeyed susan**  
*Senecio plattensis* **Prairie ragwort**  
*Sisyrinchium angustifolium* **Blue-eyed-grass**  
*Sisyrinchium campestre* **White-eyed grass**  
*Solidago canadensis* **Canada goldenrod**  
*Solidago gigantea* **Late goldenrod**

*Solidago missouriensis* **Missouri goldenrod**  
*Solidago mollis* **Soft goldenrod**  
*Solidago nemoralis* **Gray goldenrod**  
*Solidago rigida* **Stiff goldenrod**



Ladie's-tresses (photo by Dennis Skadsen)

*Spiranthes magnicamporum* **Great Plains ladies'-tresses**  
*Spiranthes cernua* **Nodding ladies'-tresses**

Both the Great Plains ladies'-tresses and the rarer nodding ladies'-tresses are found on northeast South Dakota prairies. Brown (2006) notes the only way to accurately discern between the two species is to carefully examine the seeds in a laboratory setting. Ladies'-tresses bloom from late August through September.

*Sphaeralcea coccinea* **Scarlet globemallow**



Spiderwort (photo by Dennis Skadsen)

- Tradescantia bracteata* **Bracted spiderwort**
- Tradescantia occidentalis* **Prairie spiderwort**
- Tragopogon dubius* **Goatsbeard**
- Verbena stricta* **Woolly verbena**
- Vicia americana* **American vetch**



Prairie violet (photo by Dennis Skadsen)

- Viola nuttallii* **Nuttall's violet**
- Viola pedatifida* **Prairie violet**

These two prairie violets are important larval food for several species of fritillary butterflies, including the rare Regal fritillary. Female Regal fritillaries are apparently able to detect dormant violet plants in late summer and lay eggs on nearby vegetation. When fritillary larvae hatch in the spring they feed on the emerging violet plants. In many areas of the United States, the loss of native prairie has led to the decline of both violets and fritillaries. The nuttall's and prairie violets bloom from May into June.



Nuttall's violet (photo by Dennis Skadsen)

- Viola pratincola* **Meadow violet**
- Zigadenus elegans* **White camas, Showy deathcamas**
- Zizia aptera* **Heart-leaved alexanders, Heartland alexanders**
- Zizia aurea* **Golden alexanders**

## ❖ Woodland Plants



**Ostrich ferns, Munson Gulch (photo by Dennis Skadsen)**

The plants listed and shown below occur in the woodlands and forests of northeast South Dakota. Ecologists have classified the larger forest communities of northeast South Dakota as Northern Bur Oak Mesic and Plains Basswood forests. These two forest communities are found in the coulees located along the eastern slope of the coteau in Marshall and Roberts Counties including Sica Hollow State Park. Smaller forests with these plant communities are found at Hartford Beach State Park, and the Hatchery Creek Public Access on Pickerel Lake. Another forest community Bur Oak Savannah is found on the Waubay National Wildlife Refuge. The majority of woodland wildflowers bloom from mid-May through early June.

*Actaea rubra* **Baneberry**

*Allium tricoccum* **Wild leek**

*Aquilegia canadensis* **Columbine**

*Aralia nudicaulis* **Wild sarsaparilla**



**Jack-in-the-pulpit (photo by Dennis Skadsen)**

*Arisaema triphyllum* **Jack-in-the-pulpit**



**Wild Ginger (photo by Dennis Skadsen)**

*Asarum canadense* **Wild ginger**

*Aster ciliolatus* **Lindley's, Woodland blue aster**

*Botrychium virginianum* **Rattlesnake fern**

*Cardamine concatenata* **Toothwort**

*Celastrus scandens* **Climbing bittersweet**



Climbing Bittersweet (photo by Dennis Skadsen)

*Corydalis aurea* **Golden corydalis**



Yellow lady's slipper (photo by Dave Ode)

*Cypripedium parviflorum* **Yellow lady's slipper**

Our largest orchid occurs in the rich woods of Sica Hollow and a few other undisturbed coulees located in Marshall and Roberts Counties. It may also grow along the edges of wetlands and fens where it was once known to occur on the Waubay National Wildlife Refuge and a few wetland sites in Grant County. The yellow lady's slipper blooms mid-May.



Common bladderfern (photo by Dennis Skadsen)

- Cystopteris fragilis* **Common bladderfern**
- Dicentra cucullaria* **Dutchman's breeches**
- Eupatorium rugosum* **White snakeroot**
- Hydrophyllum virginianum* **Virginia waterleaf**
- Maianthemum canadense* **False lily of the valley**

*Matteuccia struthiopteris* **Ostrich fern**

There are four species of native ferns found in northeast South Dakota woodlands including the rattlesnake fern, common bladderfern, ostrich fern, and the rarer bulbil bladder fern. Another species the marsh fern, is found growing in calcareous bogs and fens

*Polygonatum biflorum* **Smooth solomon's seal**



Bloodroot (photo by Dennis Skadsen)

*Sanguinaria canadensis* **Bloodroot**  
*Smilacina stellata* **Star-flowered false  
 solomen's seal**  
*Solidago flexicaulis* **Zigzag goldenrod**

The word trillium, or *tres* in Latin, means three. Trillium plants have three leaves, three petals, and three sepals. The nodding trillium is named due to the blossom that hangs downward below three large leaves. This plant is found in rich woods having acidic soils. It has been observed in several of the wooded coulees including Sica Hollow, Munson's Gulch, and Red Iron Springs. Nodding trillium blooms from May into early June.



Large-flowered bellwort (photo by Dennis Skadsen)

*Uvularia grandiflora* **Large-flowered bellwort**  
*Viola canadensis* **Canada violet**  
*Viola pubescens* **Yellow violet**



Nodding trillium (photo by Dennis Skadsen)

*Trillium cernuum* **Nodding trillium**

❖ **Native Woodland Trees, Shrubs and Vines**

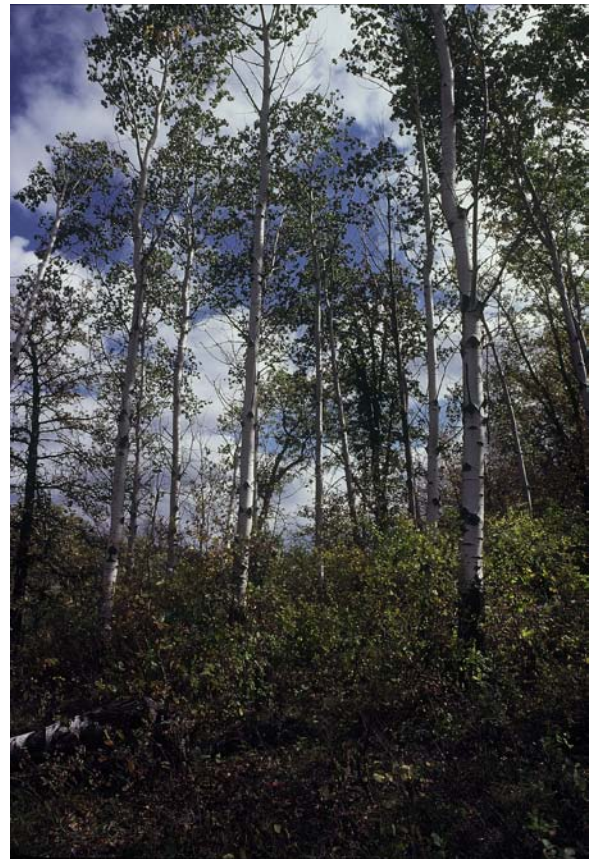


Fall Sugar maples, Sica Hollow State Park (photo by Dennis Skadsen)

The trees, shrubs, and vines listed below are all native to northeast South Dakota and can be found growing in wooded coulees and riparian forests along the shores of lakes, streams, and wetlands.

- Acer nigundo* **Box elder**
- Acer saccharum* **Sugar maple**
- Amelanchier alnifolia* **Juneberry**
- Amorpha nana* **Dwarf indigo**
- Betula papyrifera* **Paper birch**
- Celtis occidentalis* **Hackberry**
- Corylus americana* **American hazelnut**
- Corylus cornuta* **Beaked hazelnut**
- Cornus amomum* **Pale dogwood**

- Cornus stolonifera* **Red osier**
- Crataegus succulenta* **Hawthorn**
- Fraxinus pennsylvanica* **Green ash**
- Ostrya virginiana* **Ironwood**
- Parthenocissus vitacea* **Woodbine**
- Populus deltoids* **Plains cottonwood**



Quaking aspen near Hartford Beach State Park (photo by Dennis Skadsen)

- Populus tremuloides* **Quaking aspen**
- Prunus americana* **Wild plum**
- Prunus virginiana* **Choke cherry**
- Quercus macrocarpa* **Bur oak**
- Rhus glabra* **Smooth sumac**
- Ribes americanum* **Wild black currant**
- Ribes cynosbati* **Dogberry**
- Ribes missouriense* **Missouri gooseberry**
- Rubus idaeus* **Red raspberry**
- Salix amygdaloides* **Peach-leaved willow**
- Salix bebbiana* **Long-beaked willow**

*Salix discolor* **Large pussy willow**  
*Salix eriocephala* **Diamond willow**  
*Salix exigua* **Sandbar willow**  
*Salix petiolaris* **Meadow willow**



Choke cherry fruit (photo by Dennis Skadsen)

*Symphoricarpos occidentalis* **Western snowberry**  
*Tilia americana* **Basswood**  
*Toxicodendron rydbergii* **Poison ivy**  
*Ulmus americana* **American elm**  
*Ulmus rubra* **Slippery elm**



Nannyberry (photo by Dennis Skadsen)

*Viburnum lentago* **Nannyberry**  
*Vitis riparia* **River-bank grape**  
*Zanthoxylum americanum* **Prickly ash**

## ❖ Aquatic Plants

Aquatic plants grow in a wide variety of habitats that include wetlands, lakes, streams and rivers. Listed below are species found in area lakes and streams, important wildlife species, and wetland wildflowers.

Many lake property owners consider emergent and submersed aquatic plants a nuisance when growing along their shorelines, and when lakes are over-enriched by nutrients (hypereutrophic) submersed plants like coontail can become overabundant and impair the recreational use of a waterbody. These plants however, are an important component of a lakes ecosystem providing food and habitat for fish and other aquatic organisms and under most conditions should be allowed to thrive and grow.

Few field guides cover aquatic plants. Larson (1993) is the best publication for identifying aquatic plants in South Dakota.

The following list of aquatic plants were observed in northeast South Dakota lakes during recent surveys of Amsden Dam, Enemy Swim, Pickerel, Roy, and Minnewasta Lakes by the author and Dave German of the Water Resources Institute - South Dakota State University, observations and collections of Dave Ode, SD Dept. of Game, Fish, and Parks.

### Emergent Aquatic Plants

Emergent aquatic plants grow in shallow water where the majority of the plants vegetation can grow above the water line. Leaves and stems of these plants are made of spongy tissue with several air chambers making them very buoyant. Several species of birds like grebes and terns utilize this buoyant plant material to build nests that can float on the waters surface. Emergent plants also buffer shorelines from wave action that can cause shoreline erosion. Examples of

emergent aquatic plants found growing along the shorelines of northeast South Dakota lakes are listed below.

- Scirpus acutus* **Hardstem bulrush**
- Scirpus tabernaemontani* **Softstem bulrush**
- Typha angustifolia* **Narrowleaf cattail**
- Typha latifolia* **Common cattail**
- Zizania aquatica* **Annual wildrice**

### Floating-Leaf and Submerged Aquatic Plants

These plants live in water from a few feet to fifteen feet or deeper in certain lakes. The depth at which they can grow is limited by the amount of sunlight that penetrates to the bottom. Cleaner lakes like Enemy Swim that have excellent water clarity will have more abundant and deeper beds of these plants. Enemy Swim has one of the most diverse populations of submerged aquatic plants in northeast South Dakota due to its excellent water clarity. A recent survey found twenty-six species of submerged aquatic plants growing in the lake. A decline in water quality that would favor the development of algae blooms would decrease water clarity causing many of these plant species to become extirpated from the lakes flora. Floating-leaf and submerged aquatic plants found in northeast South Dakota lakes are listed below



Floatingleaf pondweed, Enemy Swim Lake (photo by Dennis Skadsen)

- Ceratophyllum demersum* **Hornwort, coontail**
- Myriophyllum exalbescens* **Water milfoil**
- Najas flexilis* **Naiad**



Yellow water lily (photo by Dennis Skadsen)

- Nuphar luteum* **Yellow water lily, spatterdock**

This is the only water lily known from northeast South Dakota and has been observed on Pickerel Lake, Chekapa Creek and Owen's Creek in Day County. The white water lily may have occurred historically in eastern South Dakota but are now probably extirpated.

- Potamogeton friesii* **Pondweed**
- Potamogeton gramineus* **Variable pondweed**
- Potamogeton illinoensis* **Illinois pondweed**
- Potamogeton natans* **Floatingleaf pondweed**
- Potamogeton pectinatus* **Sago pondweed**
- Potamogeton praelongus* **Whitestem pondweed**
- Potamogeton richardsonii* **Claspingleaf pondweed**
- Potamogeton zosteriformis* **Flatstem pondweed**
- Ruppia maritima* **Ditch grass, widgeon-grass**
- Utricularia vulgaris* **Common bladderwort**
- Zosterella dubia* **Water stargrass**

## Wetland Wildflowers and Plants

Some of the most beautiful and unusual looking wildflowers and plants grow along the shores of or in streams, wetlands, bogs and fens. Unfortunately, due to wetland drainage and habitat destruction many of the plants listed below are becoming increasingly rare.

### *Acorus calamus* **Sweet flag**



Swamp milkweed (photo by Dennis Skadsen)

### *Asclepias incarnata* **Swamp milkweed**

The swamp milkweed and joe-pye-weed (page 17) grow along the edges of permanent wetlands and streams. Both species bloom July through August.



Marsh marigold (photo by Dennis Skadsen)

### *Caltha palustris* **Marsh marigold**

The marsh marigold is found growing along spring fed creeks in Sica Hollow and Hartford Beach State Park and elsewhere. One of the earliest wildflowers to bloom in northeast South Dakota, late April through early May.



Fringed gentian (photo by Dave Ode)

### *Gentianopsis crinita* **Fringed gentian**

This flower, the twayblade, bogbean, and grass-of-parnassus listed and shown below, grow along calcareous fens, springs, and bogs. These habitats are extremely rare, and due to nutrient enrichment from nearby croplands are being invaded by phragmites and narrow-leaf cattails that eventually crowd out these native wildflowers. Changes in groundwater flow due to well drilling and spring development, and grazing of these sites by livestock; all cause irreversible damage to these sensitive ecosystems. The fringed gentian blooms in late summer.



Narrowleaf cottonsedge (photo by Dennis Skadsen)

*Eriophorum polystachion* **Narrowleaf cottonsedge**

The narrowleaf cottongrass is a species of sedge that grows along the edges of fens, bogs, and springs. Due to the large seed head that resembles a ball of cotton, it is easily observed when in bloom June through July.

*Eupatorium maculatum* **Joe-Pye weed**

*Impatiens capensis* **Spotted touch-me-not**  
*Impatiens pallida* **Pale touch-me-not**

The touch-me-nots grow along the edges of woodland streams and springs. Ruby-throated hummingbirds are often observed sipping nectar from these flowers at Sica Hollow and Hartford Beach State Parks, July through September.



Joe-pye weed (photo by Dennis Skadsen)

*Liparis loeselii* **Loesel's twayblade**  
*Lobelia kalmii* **Kalm's lobelia**



Great blue lobelia (photo by Dennis Skadsen)

*Lobelia siphilitica* **Great blue lobelia**



Buckbean (photo by Dennis Skadsen)

*Menyanthes trifoliata* **Buckbean**



Northern green bog orchid (photo by Dennis Skadsen)

*Platanthera aquilonis* **Northern green bog orchid**

The Northern green bog orchid and Loesel's twayblade are two very inconspicuous native orchids, which could be easily overlooked in the field. In fact, the Loesel's twayblade was only recently discovered to be growing in northeast South Dakota in 1990s. The twayblade grows in calcareous fens, the bog orchid has been observed in the same habitats as the twayblade, but may also grow along the wet margins of streams and wetlands.



Thick-leaved grass of Parnassus (photo by Dave Ode)

*Parnassia glauca* **Thick-leaved grass of Parnassus**

*Sagittaria cuneata* **Arrowhead, duck potato**  
*Sparganium eurycarpum* **Giant burreed**

## ❖ Endangered and Threatened Species

None of the above species are currently listed as state or federally endangered at this time. However, one federally threatened species, the western prairie fringed orchid (shown below), may possibly occur in the area. Any observations of this plant should be reported to the S.D. Dept. of Game, Fish, and Park's Natural Heritage Program or the U.S. Fish and Wildlife Service.



Western prairie fringed orchid (photo by Dennis Skadsen)

The South Dakota Natural Heritage Program managed by the SD Dept. of Game, Fish, and Parks monitors a total of 213 species of rare and uncommon plants. A complete list can be viewed at:

<http://gfp.sd.gov/wildlife/threatened-endangered/rare-plant.aspx>

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