



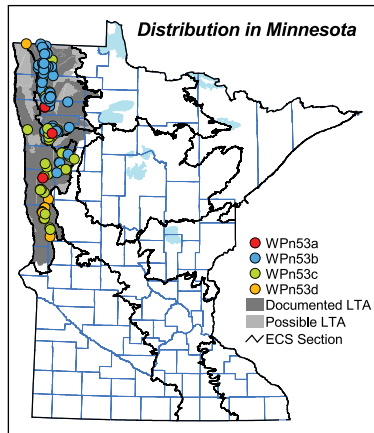
## Northern Wet Prairie

Grass-dominated but forb-rich herbaceous communities, often with a strong shrub component, on somewhat poorly drained to poorly drained loam soils formed in glaciolacustrine sediments, unsorted glacial till, or less frequently outwash deposits. Present primarily on level to very gently sloping sites. Flooded for brief periods at most; upper part of rooting zone is not saturated for most of growing season. Drought stress is infrequent, usually brief, and not severe. Fires were very frequent historically.

### Vegetation Structure & Composition

Description is based on summary of vegetation data from 167 plots (relevés).

- Graminoid** cover is usually continuous (75–100%). Tall grasses dominate, but several midheight and low grasses and sedges are also important. Prairie cordgrass (*Spartina pectinata*) and big bluestem (*Andropogon gerardii*) are the dominant tall grasses; tufted hair grass (*Deschampsia cespitosa*), narrow reedgrass (*Calamagrostis stricta*), and prairie dropseed (*Sporobolus heterolepis*) are also important grasses. Baltic rush (*Juncus arcticus*) and Buxbaum's sedge (*Carex buxbaumii*) are often important components, and rigid sedge (*C. tetanica*) and flattened spikerush (*Eleocharis compressa*) are frequently present. Mat muhly grass (*Muhlenbergia richardsonis*) is typically abundant, growing under taller species. Mat muhly and other low and midheight graminoids dominate wet prairies where salt concentrations in the soil are high.
- Forb** cover is sparse to patchy (5–50%). Canada goldenrod (*Solidago canadensis*) and giant, sawtooth, or Nuttall's sunflower (*Helianthus giganteus*, *H. grosseserratus*, or *H. nuttallii*) are typically most common. Other common taller forbs are tall meadow-rue (*Thalictrum dasycarpum*), eastern panicled aster (*Aster lanceolatus*), and spotted water hemlock (*Cicuta maculata*). Common midheight species are prairie loosestrife (*Lysimachia quadrifolia*), northern bedstraw (*Galium boreale*), heath aster (*Aster ericoides*), golden alexanders (*Zizia aurea*), grass-leaved goldenrod (*Euthamia graminifolia*), Riddell's goldenrod (*Solidago riddellii*), and clasping dogbane (*Apocynum sibiricum*). Common strawberry (*Fragaria virginiana*), golden or false golden ragwort (*Senecio aureus* or *S. pseudoaureus*), and northern bog violet (*Viola nephrophylla*) are typically common in the lowest layer. Forb diversity and height decrease where soil salinity is elevated.
- Shrub layer** is absent to interrupted (0–75% cover). Slender willow (*Salix petiolaris*) is the most widespread of the major shrub species. Bog birch (*Betula pumila*) and shrubby cinquefoil (*Potentilla fruticosa*) are major components in the Tallgrass Aspen Parklands (TAP) Province, but less common southwards. Bebb's willow (*Salix bebbiana*) and pussy willow (*Salix discolor*) are widespread frequently present species with lesser cover values. Roses, including prairie rose (*Rosa arkansana*) and Woods' rose (*Rosa woodsii*), are often present.



### Landscape Setting & Soils

Because of the extremely shallow drainage gradient of the land surface and the impermeability of soils formed in fine-textured lacustrine sediments, WPn53 communities were common and often extensive in the lake plain formed by Glacial Lake Agassiz, occupying even very slight depressions. WPn53 occurred in intricate mosaics with Northern Mesic Prairie (UPn23) in areas of complex microrelief believed to be the



result of shrink-swell processes in the lacustrine clays. Conversion of the lake plain to cropland has left very few examples in these areas. WPn53 is still common in the very low-relief lake-modified ground moraine that dominates the TAP Province, occupying abundant shallow depressions in a complex, fine-grained mosaic with Upland Prairie and Open Rich Peatland communities. WPn53 is also common in the bands of closely spaced old beach ridges along the eastern margin of the glacial lake plain, where these communities occupy low areas between beach ridges. In the limited area of ground moraine on the eastern side of the beach-ridge zone of the Glacial Lake Agassiz basin, WPn53 occurred in glacial meltwater channels and in the numerous small depressions that dotted the undulating to rolling prairie landscape, and occasional examples remain. Soils are poorly drained loams, most commonly fine textured, although coarser-textured loams and even loamy sands also support WPn53 where the water table is persistently close to the soil surface. All soils are mollisols, characterized by thick, dark upper horizons with high base saturation and dominantly bivalent cations. The humus content is high to very high, but all wet prairie soils are mineral soils.

### **Natural History**

Although WPn53 is characterized by wet-mesic or wet conditions, communities in this class are not as strongly influenced by wetland processes associated with inundation and soil saturation as Wet Meadow communities. Flooding episodes are brief following snowmelt and heavy rains. The water table typically remains within the rooting zone of most plants for several weeks during the growing season, but at least the upper part of the zone is not saturated for most of the season. In some situations on slopes, groundwater seepage maintains continuously moist but not saturated soil conditions. The dominant plant species in WPn53 lack aerenchyma to transport oxygen to their roots, which are necessary to survive prolonged soil anoxia associated with saturation. Local areas of salt accumulation (primarily carbonates and sulfates of calcium and magnesium derived from glacial drift) within wet sites are fairly common in the RRV, and occasional in the TAP Province. Prominent among the dominants of these saline wet habitats are several species associated with droughty upland sites that can also tolerate osmotically induced water shortage. Recurrent fire is essential for the existence of WPn53, as environmental conditions are otherwise favorable for the development of forest. Shrubs, mainly willows (*Salix* spp.), are typically present in WPn53, and in the prolonged absence of fire these increase in height and cover to form thickets that are readily colonized by trees. Fire also recycles nutrients bound up in litter and promotes flowering and seed production. Fire temporarily opens up the soil surface and so probably plays an important role in plant regeneration. Before Euro-American settlement, grazing and trampling by large ungulates were presumably regular occurrences in WPn53 communities, although it is possible that wet prairies were not as favored as upland prairies. The contribution of these disturbances to the composition and structure of the vegetation is not well understood. Episodic grazing probably allows for the persistence of some native species that cannot reproduce in the dense canopy of tall grasses and forbs characteristic of WPn53; these would include shorter species and especially annual or biennial ones. Historically, spatial patchiness in grazing intensity also influenced fire behavior, providing a shifting patchwork of refugia for fire-sensitive animal species. The fertile soils and low relief of WPn53 are ideal for row-crop agriculture, and almost all of the land that supported these communities has been drained and converted to cropland. Most of the small amount of land that has not been cultivated has been used for season-long grazing by confined livestock, which has resulted in the replacement of most of the native species by introduced ones.

### **Similar Native Plant Community Classes**

#### **• WPs54 Southern Wet Prairie**

WPs54 is similar to WPn53 but less likely to have significant shrub cover. Bog birch and shrubby cinquefoil, which are common in WPn53, especially in the LAP, are very rare in WPs54, and the common willows of WPn53, slender willow, Bebb's willow, and pussy



willow, are uncommon in WPs54. Tufted hair grass is absent from WPs54 but common in WPn53. Species restricted to WPs54 are either uncommon or occur in only part of the range of WPs54. Elevated soil salinity is less common in WPs54 than in WPn53. The boundary between the ranges of these two classes is set more or less by convention, and further study may determine that it should be repositioned or abandoned.

WPn53 Indicator Species	(freq%)	
	WPn53	WPs54
Tufted hair grass ( <i>Deschampsia cespitosa</i> )	62	-
Bog birch ( <i>Betula pumila</i> )	44	-
White aster-like goldenrod ( <i>Solidago ptarmicoides</i> )	30	-
Kalm's lobelia ( <i>Lobelia kalmii</i> )	20	-
Crawe's sedge ( <i>Carex crawei</i> )	13	2
Slender willow ( <i>Salix petiolaris</i> )	56	10
Bebb's willow ( <i>Salix bebbiana</i> )	47	10
Seaside arrowgrass ( <i>Triglochin maritima</i> )	25	6

WPs54 Indicator Species	(freq%)	
	WPn53	WPs54
Gray-headed coneflower ( <i>Ratibida pinnata</i> )	-	27
Skyblue aster ( <i>Aster oolentangiensis</i> )	-	22
Wild garlic ( <i>Allium canadense</i> )	-	16
Cup plant ( <i>Silphium perfoliatum</i> )	-	12
Canada tick trefoil ( <i>Desmodium canadense</i> )	1	22
Veiny pea ( <i>Lathyrus venosus</i> )	1	18
Prairie phlox ( <i>Phlox pilosa</i> )	2	33
Tussock sedge ( <i>Carex stricta</i> )	2	24

## • UPn23 Northern Mesic Prairie

UPn23 grades into WPn53 at the moist end of the moisture gradient in UPn23, without a distinct floristic boundary between the two classes. UPn23 typically occurs on drier sites on perceptibly convex sites or slopes, but topographic differences between the classes are not always apparent. Indian grass (*Sorghastrum nutans*), little bluestem (*Schizachyrium scoparium*), and prairie dropseed are more important in UPn23 than in WPn53. Conversely, prairie cordgrass and narrow reedgrass are much less important in UPn23 than in WPn53. Sedges (*Carex* spp.) are only a minor component of UPn23 but important in WPn53. Leadplant (*Amorpha canescens*), a characteristic plant of UPn23, is rarely present in WPn53.

WPn53 Indicator Species	(freq%)	
	WPn53	UPn23
Cut-leaved bugleweed ( <i>Lycopus americanus</i> )	23	1
Buxbaum's sedge ( <i>Carex buxbaumii</i> )	46	4
Sartwell's sedge ( <i>Carex sartwellii</i> )	31	4
Eastern panicled aster ( <i>Aster lanceolatus</i> )	51	7
Spotted water hemlock ( <i>Cicuta maculata</i> )	49	7
Seaside arrowgrass ( <i>Triglochin maritima</i> )	25	4
Flattened spikerush ( <i>Eleocharis compressa</i> )	32	5
Swamp lousewort ( <i>Pedicularis lanceolata</i> )	31	8

UPn23 Indicator Species	(freq%)	
	WPn53	UPn23
Porcupine grass ( <i>Stipa spartea</i> )	-	35
Silverleaf scurpea ( <i>Pediomelum argophyllum</i> )	-	29
White prairie clover ( <i>Dalea candida</i> )	-	22
Leadplant ( <i>Amorpha canescens</i> )	1	23
Wild bergamot ( <i>Monarda fistulosa</i> )	2	44
Harebell ( <i>Campanula rotundifolia</i> )	3	48
Smooth blue aster ( <i>Aster laevis</i> )	5	62
Rough blazing star ( <i>Liatris aspera</i> )	4	34

## • WMp73 Prairie Wet Meadow/Carr

WMp73 and WPn53 are nearly indistinguishable in topographic character, but the vegetation indicates that WMp73 is subject to shallow flooding and soil saturation of longer duration than is WPn53. Prairie cordgrass and narrow reedgrass are major species in both, but woolly sedge (*Carex pellita*) and Sartwell's sedge (*Carex sartwellii*) are major species in WMp73 and minor components of WPn53. Several prairie grasses that are common in WPn53, such as big bluestem, mat muhly grass, and prairie dropseed, are rare in WMp73, and forb diversity is lower in WMp73 than in WPn53.

WPn53 Indicator Species	(freq%)	
	WPn53	WMp73
Golden or false golden ragwort*	49	-
Heart-leaved alexanders ( <i>Zizia aptera</i> )	40	-
Prairie dropseed ( <i>Sporobolus heterolepis</i> )	40	-
Northern plains blazing star ( <i>Liatris ligulistylis</i> )	37	-
Big bluestem ( <i>Andropogon gerardii</i> )	78	6
Mat muhly grass ( <i>Muhlenbergia richardsonis</i> )	67	6
Tufted hair grass ( <i>Deschampsia cespitosa</i> )	62	6
Heath aster ( <i>Aster ericoides</i> )	55	6

WMp73 Indicator Species	(freq%)	
	WPn53	WMp73
Red-stalked spikerush ( <i>Eleocharis palustris</i> )	-	13
Hardstem or slender bulrush**	1	13
Water smartweed ( <i>Polygonum amphibium</i> )	4	38
Common mint ( <i>Mentha arvensis</i> )	6	44
Rough bugleweed ( <i>Lycopus asper</i> )	10	50
Bluejoint ( <i>Calamagrostis canadensis</i> )	12	44
Spotted Joe pye weed ( <i>Eupatorium maculatum</i> )	8	25
Woundwort ( <i>Stachys palustris</i> )	11	25

\*Golden or false golden ragwort (*Senecio aureus* or *S. pseudoaureus*) \*\*Hardstem or slender bulrush (*Scirpus acutus* or *S. heterochaetus*)

## • WMs92 Southern Basin Wet Meadow/Carr

WPn53 and WMs92 occur in similar landscape settings, but soils in WPn53 are only briefly saturated in late spring, while soils in WMs92 are saturated throughout the summer. As a result, WMs92 is more likely to have wetland species tolerant of long periods of inundation or saturated soils. WMs92 is usually strongly dominated by the broad-leaved sedges slough sedge (*Carex atherodes*) and beaked sedge (*C. utriculata*) and occasionally by lake sedge (*C. lacustris*); whitetop (*Scolochloa festucacea*) is typically codominant or an important subdominant with slough sedge, while bluejoint (*Calamagrostis canadensis*) is usually the major grass with lake sedge (*Carex lacustris*).



Prairie cordgrass is often present in WMs92 but is less common than in WPn53. The other typical prairie grasses of WPn53 are very rare in WMs92. WMs92 is uncommon in the range of WPn53.

WPn53 Indicator Species	(freq%)	
	WPn53	WMs92
Big bluestem ( <i>Andropogon gerardii</i> )	78	-
Mat muhly grass ( <i>Muhlenbergia richardsonis</i> )	67	-
Prairie loosestrife ( <i>Lysimachia quadriflora</i> )	62	-
Tufted hair grass ( <i>Deschampsia cespitosa</i> )	62	-
Northern bedstraw ( <i>Galium boreale</i> )	60	-
Heath aster ( <i>Aster ericoides</i> )	55	-
Tall meadow-rue ( <i>Thalictrum dasycarpum</i> )	52	-
Eastern panicled aster ( <i>Aster lanceolatus</i> )	51	-

WMs92 Indicator Species	(freq%)	
	WPn53	WMs92
Beaked sedge ( <i>Carex utriculata</i> )	-	60
Red-stalked spikerush ( <i>Eleocharis palustris</i> )	-	60
Whitetop ( <i>Scalochloa festucacea</i> )	1	80
Slough sedge ( <i>Carex atherodes</i> )	1	80
Aquatic sedge ( <i>Carex aquatilis</i> )	1	40
Tufted loosestrife ( <i>Lysimachia thyrsoiflora</i> )	1	40
Water smartweed ( <i>Polygonum amphibium</i> )	4	80
Common mint ( <i>Mentha arvensis</i> )	6	40

## • WMs83 Southern Seepage Meadow/Carr

WMs83 can appear similar to WPn53 but occurs on organic and mineral soils where groundwater seepage maintains high soil moisture conditions, whereas WPn53 is always on mineral soils. Sedges (*Carex* spp.) dominate WMs83, whereas grasses dominate WPn53. The major prairie grasses of WPn53 are rare in WMs83, except narrow reedgrass and prairie cordgrass, and these are not common when present. Broad-leaved cattail (*Typha latifolia*) is frequently present in WMs83 but very rare in WPn53. Great water dock (*Rumex orbiculatus*) and tufted loosestrife (*Lysimachia thyrsoiflora*) are two typical forbs of WMs83 that are rare in WPn53. Prairie loosestrife, a characteristic forb of WPn53, is absent from WMs83. WMs83 is uncommon in the range of WPn53.

WPn53 Indicator Species	(freq%)	
	WPn53	WMs83
Big bluestem ( <i>Andropogon gerardii</i> )	78	-
Mat muhly grass ( <i>Muhlenbergia richardsonis</i> )	67	-
Prairie loosestrife ( <i>Lysimachia quadriflora</i> )	62	-
Tufted hair grass ( <i>Deschampsia cespitosa</i> )	62	-
Heath aster ( <i>Aster ericoides</i> )	55	-
Rigid sedge ( <i>Carex tetanica</i> )	41	-
Heart-leaved alexanders ( <i>Zizia aptera</i> )	40	-
Prairie dropseed ( <i>Sporobolus heterolepis</i> )	40	-

WMs83 Indicator Species	(freq%)	
	WPn53	WMs83
Touch-me-not ( <i>Impatiens</i> spp.)	-	38
Great water dock ( <i>Rumex orbiculatus</i> )	1	50
Aquatic sedge ( <i>Carex aquatilis</i> )	1	63
Tufted loosestrife ( <i>Lysimachia thyrsoiflora</i> )	1	50
Broad-leaved cattail ( <i>Typha latifolia</i> )	1	50
Common marsh marigold ( <i>Caltha palustris</i> )	3	50
Water smartweed ( <i>Polygonum amphibium</i> )	4	63
Marsh bellflower ( <i>Campanula aparinoides</i> )	7	63

## • OPp93 Prairie Extremely Rich Fen

OPp93 is somewhat similar to occurrences of WPn53 that are influenced by groundwater seepage (WPn53a). In OPp93, groundwater upwelling is evident, with marly pools present and usually some visible flow of water through and out of the community, and the surface is typically buoyant. In comparison, the substrate is moist but not saturated in WPn53 and is solid underfoot. Soils in OPp93 are peat, often mixed with marl and sometimes poorly consolidated, whereas WPn53 is characterized by mineral soils. The low, tussocky lawns that are usually present in OPp93 are distinctively different from the taller, lush vegetation characteristic of WPn53.

WPn53 Indicator Species	(freq%)	
	WPn53	OPp93
Prairie dropseed ( <i>Sporobolus heterolepis</i> )	80	-
Purple prairie clover ( <i>Dalea purpurea</i> )	60	-
Little bluestem ( <i>Schizachyrium scoparium</i> )	30	-
Indian grass ( <i>Sorghastrum nutans</i> )	30	-
Heath aster ( <i>Aster ericoides</i> )	70	5
Prairie cordgrass ( <i>Spartina pectinata</i> )	70	5
Autumn sneezeweed ( <i>Helenium autumnale</i> )	40	3
Maximilian's sunflower ( <i>Helianthus maximiliani</i> )	30	3

OPp93 Indicator Species	(freq%)	
	WPn53	OPp93
Sterile sedge ( <i>Carex sterilis</i> )	-	86
Aquatic sedge ( <i>Carex aquatilis</i> )	-	46
Hardstem or slender bulrush*	-	41
Tufted bulrush ( <i>Scirpus cespitosus</i> )	-	30
Hair-like beak rush ( <i>Rhynchospora capillacea</i> )	-	27
Lead-colored sedge ( <i>Carex livida</i> )	-	24
Sage-leaved willow ( <i>Salix candida</i> )	10	78
Marsh arrowgrass ( <i>Triglochin palustris</i> )	10	59

\*Hardstem or slender bulrush (*Scirpus acutus* and *S. heterochaetus*)

## Native Plant Community Types in Class

### • WPn53a Wet Seepage Prairie (Northern)

Graminoid-dominated and very forb-rich communities typically on or at the bases of slight slopes where some groundwater seepage influence is present, usually small in area. Big bluestem is typically the dominant species; prairie cordgrass is usually common. Mat muhly grass is often abundant beneath the taller grasses. Prairie



dropseed, narrow reedgrass, tufted hair grass, and Baltic rush (*Juncus arcticus*) are frequently present and sometimes common. Clustered muhly grass (*Muhlenbergia glomerata*), rigid sedge (*Carex tetanica*), and Buxbaum's sedge (*C. buxbaumii*) are also frequent but generally less abundant. Northern bedstraw, prairie loosestrife, Virginia mountain mint (*Pycnanthemum virginianum*), and tall sunflowers—including giant, sawtooth, and Nuttall's sunflower—are the most common forbs. Other common forbs are heart-leaved alexanders (*Zizia aptera*), golden alexanders, flat-topped aster (*Aster umbellatus*), eastern panicled aster, heath aster, northern plains blazing star (*Liatris ligulistylis*), Canada goldenrod, Riddell's goldenrod, grass-leaved goldenrod, swamp lousewort (*Pedicularis lanceolata*), spotted water hemlock, and common strawberry. Spotted Joe pye weed (*Eupatorium maculatum*) is much more common in this type than in any other of WPn53, although it is present in only about a third of WPn53a plots. Shrubs are typically present but have less than 30% cover. The most frequent shrubs are slender willow, pussy willow, and red-osier dogwood (*Cornus sericea*). WPn53a has been documented in the southwestern part of the LAP and in the southern half of the RRV. Description is based on summary of vegetation data from 10 plots.

● **WPn53b Wet Brush-Prairie (Northern)**

WPn53b ranges in character from graminoid-dominated communities with a strong shrub component to shrub-dominated communities with a strong graminoid component. Herbaceous composition is similar to that of WPn53c (see below). Shrub cover is commonly 25–50% and often greater, up to 75%. Principal shrubs are slender willow, Bebb's willow, pussy willow, bog birch, and shrubby cinquefoil; red-osier dogwood is also frequent. Clusters of suckers or saplings of trembling aspen and balsam poplar are often present. WPn53b has been documented in the LAP and less frequently in the southern half of the RRV. Description is based on summary of vegetation data from 76 plots.

● **WPn53c Wet Prairie (Northern)**

Grass-dominated, forb-rich herbaceous communities. Prairie cordgrass and big bluestem are the dominant species. Mat muhly grass is usually abundant beneath the taller grasses. Tufted hair grass, narrow reedgrass, Baltic rush (*Juncus arcticus*), and Buxbaum's sedge (*Carex buxbaumii*) are frequently present and sometimes common. Switchgrass (*Panicum virgatum*), prairie dropseed, and flattened spikerush (*Eleocharis compressa*) are less frequent but common when present, while rigid sedge (*Carex tetanica*) is generally of lower abundance. Canada goldenrod is the most abundant forb. Other important forbs are clasping dogbane, Maximilian's sunflower (*Helianthus maximiliani*), tall sunflowers (including giant, sawtooth, and Nuttall's sunflower), tall meadow-rue, golden alexanders, prairie loosestrife, heath aster, northern bedstraw, golden or false golden ragwort, Riddell's goldenrod, Virginia mountain mint, eastern panicled aster, and common strawberry. Shrub cover is absent to sparse (0–25%). Slender willow is the most common shrub. WPn53c has been documented in the south half of the RRV and in the western part of the LAP. Description is based on summary of vegetation data from 60 plots.

● **WPn53d Wet Saline Prairie (Northern)**

Grass-dominated herbaceous communities, most commonly present as small inclusions in wet prairies but sometimes more extensive. Zonation related to differences in salt concentration is usually evident; bare, salt-encrusted patches are sometimes present. WPn53d is much less species rich than other types in this class. Several species characteristic of mesic and drier habitats are common. Mat muhly grass, switchgrass, salt grass (*Distichlis spicata*), and little bluestem are the major species. Prairie cordgrass is frequently present but subdominant or minor. Big bluestem, Indian grass, and prairie dropseed may also be present. In addition to salt grass, several other grass and sedge species distinctive of WPn53d relative to the other types in WPn53 are typically present. Of these, foxtail barley (*Hordeum jubatum*) and rough dropseed (*Sporobolus asper*) are most common, while alkali cordgrass (*Spartina gracilis*), scratchgrass (*Muhlenbergia asperifolia*), plains bluegrass (*Poa arida*), and Hall's sedge (*Carex hallii*) are frequent but lesser components. Alkali plantain (*Plantago eriopoda*) and northern gentian (*Gentiana affinis*) are distinctive forbs of WPn53d; the first is typically present, and the second is occasional. Other important forbs in WPn53d are heath aster and western



ragweed (*Ambrosia psilostachya*). Maximilian's sunflower and Canada goldenrod are frequently present. Several species common in other types in WPn53 are rare to absent in WPn53d, including Buxbaum's sedge (*Carex buxbaumii*), prairie loosestrife, tall meadow-rue, and golden alexanders. Shrubs are rarely present. WPn53d has been documented in the southern half of the RRV and in the western part of the LAP. Description is based on summary of vegetation data from 20 plots.



photo by R.P. Dana, MN DNR

Kittson County, MN





## WPn53 Northern Wet Prairie — Species Frequency and Cover

	freq%	cover		freq%	cover
<b>Forbs, Ferns &amp; Fern Allies</b>					
Canada goldenrod ( <i>Solidago canadensis</i> )	66	••	New England aster ( <i>Aster novae-angliae</i> )	21	•
Giant, Sawtooth, or Nuttall's sunflower*	64	•••	Swamp thistle ( <i>Cirsium muticum</i> )	21	•
Prairie loosestrife ( <i>Lysimachia quadriflora</i> )	62	••	Yellow stargrass ( <i>Hypoxis hirsuta</i> )	20	•
Northern bedstraw ( <i>Galium boreale</i> )	60	•••	Kalm's lobelia ( <i>Lobelia kalmii</i> )	20	•
Heath aster ( <i>Aster ericoides</i> )	54	••	Bastard toadflax ( <i>Comandra umbellata</i> )	17	•
Tall meadow-rue ( <i>Thalictrum dasycarpum</i> )	52	••	Great blazing star ( <i>Liatris pycnostachya</i> )	16	•
Eastern panicled aster ( <i>Aster lanceolatus</i> )	51	••	Alkali plantain ( <i>Plantago eriopoda</i> )	10	•••
Common strawberry ( <i>Fragaria virginiana</i> )	50	•••	<b>Grasses &amp; Sedges</b>		
Golden alexanders ( <i>Zizia aurea</i> )	50	••	Prairie cordgrass ( <i>Spartina pectinata</i> )	84	•••
Spotted water hemlock ( <i>Cicuta maculata</i> )	49	••	Big bluestem ( <i>Andropogon gerardii</i> )	78	•••
Golden or false golden ragwort ( <i>Senecio aureus</i> or <i>S. pseudoaureus</i> )	49	••	Mat mulch grass ( <i>Muhlenbergia richardsonii</i> )	66	•••
Grass-leaved goldenrod ( <i>Euthamia graminifolia</i> )	48	••	Tufted hair grass ( <i>Deschampsia cespitosa</i> )	62	•••
Riddell's goldenrod ( <i>Solidago riddellii</i> )	48	••	Narrow reedgrass ( <i>Calamagrostis stricta</i> )	50	••
Marsh veitchling ( <i>Lathyrus palustris</i> )	47	••	Baltic rush ( <i>Juncus arcticus</i> )	48	••
Clasping dogbane ( <i>Apocynum sibiricum</i> )	46	••	Buxbaum's sedge ( <i>Carex buxbaumii</i> )	46	•••
Maximilian's sunflower ( <i>Helianthus maximiliani</i> )	42	••	Rigid sedge ( <i>Carex tetanica</i> )	41	•••
Heart-leaved alexanders ( <i>Zizia aptera</i> )	40	••	Prairie dropseed ( <i>Sporobolus heterolepis</i> )	40	•••
Black-eyed Susan ( <i>Rudbeckia hirta</i> )	38	••	Slender wheatgrass ( <i>Elymus trachycaulus</i> )	34	•
Northern plains blazing star ( <i>Liatris ligulistylis</i> )	38	••	Clustered mulch grass ( <i>Muhlenbergia glomerata</i> )	34	•
Northern bog violet ( <i>Viola nephrophylla</i> )	36	••	Flattened spikerush ( <i>Eleocharis compressa</i> )	32	••
Giant goldenrod ( <i>Solidago gigantea</i> )	34	••	Sartwell's sedge ( <i>Carex sartwellii</i> )	31	••
Virginia mountain mint ( <i>Pycnanthemum virginianum</i> )	33	•••	Switlograss ( <i>Panicum virgatum</i> )	25	•••
Swamp lousewort ( <i>Pedicularis lanceolata</i> )	31	••	Woolly sedge ( <i>Carex pellita</i> )	24	••
Flat-topped aster ( <i>Aster umbellatus</i> )	30	••	Indian grass ( <i>Sorghastrum nutans</i> )	19	••
Gray goldenrod ( <i>Solidago nemoralis</i> )	29	••	Little bluestem ( <i>Schizachyrium scoparium</i> )	15	••
Stiff goldenrod ( <i>Solidago rigida</i> )	27	••	Very slender sedge ( <i>Carex praegracilis</i> )	14	••
Purple prairie clover ( <i>Dalea purpurea</i> )	26	••	Salt grass ( <i>Distichlis spicata</i> )	8	•••
White canass ( <i>Zigadenus elegans</i> )	26	••	<b>Shrubs</b>		
Autumn sneezeweed ( <i>Helium autumnale</i> )	25	••	Slender willow ( <i>Salix petiolaris</i> )	56	••
Seaside arrowgrass ( <i>Triglochin maritima</i> )	25	••	Bebb's willow ( <i>Salix bebbiana</i> )	47	••
Cut-leaved bugleweed ( <i>Lycopus americanus</i> )	23	••	Bog birch ( <i>Betula pumila</i> )	44	•••
Silverweed ( <i>Potentilla anserina</i> )	23	•••	Shrubby cinquefoil ( <i>Potentilla fruticosa</i> )	43	•••
Smooth scouing rush ( <i>Equisetum laevigatum</i> )	22	••	Pussy willow ( <i>Salix discolor</i> )	43	••
White aster-like goldenrod ( <i>Solidago parviflorus</i> )	22	••	Red-osier dogwood ( <i>Cornus sericea</i> )	20	••
	22	••	Woods' rose ( <i>Rosa woodsii</i> )	15	••

\*Giant, Sawtooth, or Nuttall's sunflower (*Helianthus giganteus*, *H. grosseserratus*, or *H. nuttallii*)