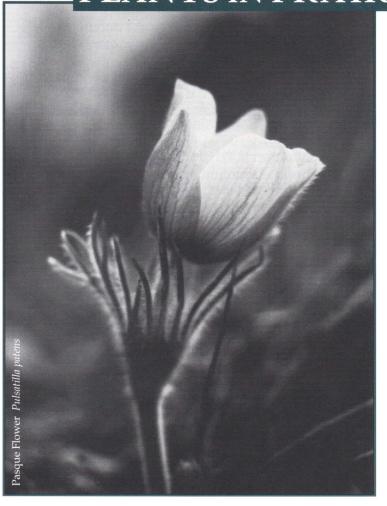
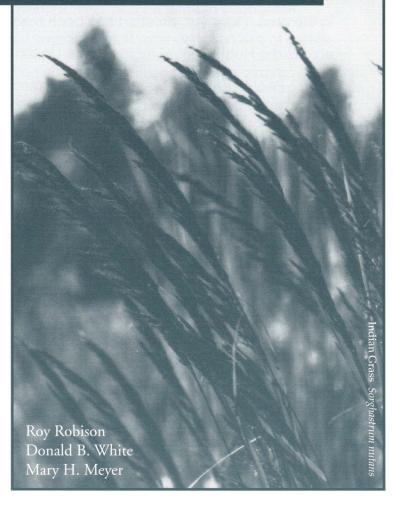


PLANTS IN PRAIRIE COMMUNITIES







This bulletin describes three typical prairie communities: **wet, mesic**, and **dry**, and the plants found in these communities. Characteristics of each community are provided along with typical plants found in each site. This information should be useful to professional designers, teachers, landscape architects as well as amateur gardeners who have an interest in native plants and their landscape use.

Although the extensive table "Characteristics of Prairie Plants" lists 158 grasses and forbs, it is not offered as a comprehensive or exhaustive compilation of all native plants found in the area. However, an effort has been made to cover the more significant species occurring across the North Central region of the United States.

People are not always aware of protected and/or rare species. Each state has its own regulations as well as lists of threatened and endangered plants. Some states may require licensing or registration with the Department of Natural Resources (DNR) or other agencies for collection and/or propagation of native plants. The by-word of all who are interested in native plants should be "Check before you collect." Check with your local county extension educator, the DNR, the Department of Agriculture, private landowners or the appropriate state agency if public lands are involved. In all cases, respect for the environment and other people's property is important.

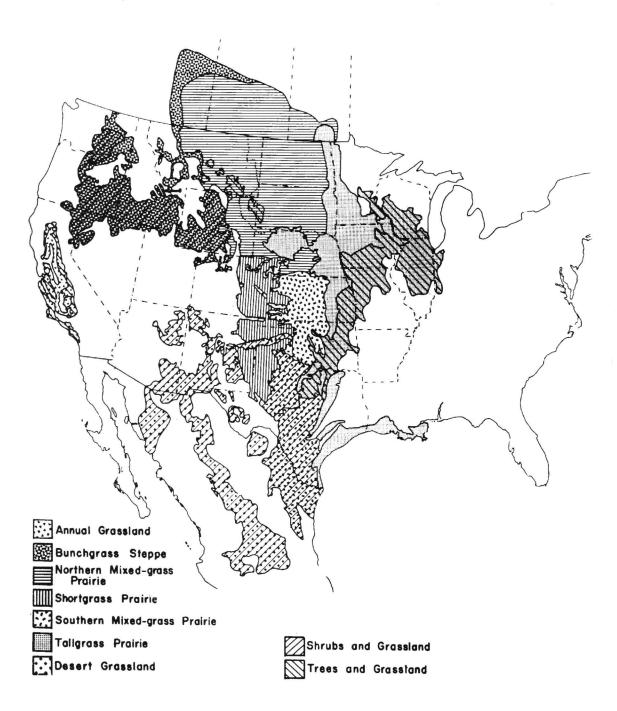
Planting and maintenance of a prairie is beyond the scope of this publication. Consult the reference list for further information, and for references on botanical names and native plant organizations and horticultural societies.



Prior to European settlement, vast grasslands or prairies existed throughout the central United States (Map on page 3). Today, very little of the original prairie exists due to commercial agriculture, development of communities, towns, roads, etc. Some estimates are that the shortgrass prairie and the mixed-grass prairie cover about 1/5 and 1/4, respectively, of the areas they once did. Of the tallgrass prairie, only about 1% remains in the United States today. These three grassland communities are based on rainfall. The higher annual precipitation in the east resulted in the tallgrass prairie and the decreased moisture westward resulted in shortgrass.

Within the major types of prairies (short, mixed, and tallgrass) exist communities of plants that thrive on specific sites. Three of the most common sites—wet, mesic, and dry—are discussed in this bulletin. Species composition of these three habitats changes as one goes from east (tallgrass) to west (shortgrass). A wet habitat in the tallgrass prairie is floristically quite different from a wet habitat in the shortgrass prairie. This publication generally applies to the tallgrass and mixed-grass regions. Many plants are quite restricted in their habitat preferences and may be limited to one habitat. For example, *Aster simplex*, panicled aster, prefers only wet sites, while other species, like *Schizachyrium scoparium*, little bluestem, and *Oenothera pilosella*, prairie sundrops, are more tolerant and may occur in all three communities.

Major grassland types of the U.S. and adjacent Canada and Mexico



Adapted from the True Prairie Ecosystem 1981. T.G. Risser.







New England Aster



Swamp Milkweed

PLANTS OF WET PRAIRIES

The wet prairie plant community develops wherever the water table is high. Areas that are flooded or saturated by groundwater for more than a few days during a normal year are typical of wet prairies. Here the soil is waterlogged within the plant root zone for extended periods of time during the growing season. Local wet prairies develop in depressions where runoff accumulates or where the water table is close to the surface. The soil of wet prairie consists of silt and clay loam with high organic matter and nutrients. Wet prairie soils are poorly drained and are typically dominated by grasses with sedges an important component of the community. Forbs or wildflowers are abundant but usually fewer forb species occur in wet prairies than in mesic prairies. Plants found growing in this environment include:

Wild Garlic Allium canadense Big Bluestem Andropogon gerardi Canada Mayflower Anemone canadensis Indian Hemp Apocynum cannabinum Swamp Milkweed Asclepias incarnata Common Milkweed A. syriaca New England Aster A. novae-angliae Crooked-stemmed Aster A. prenanthoides Purple-stemmed Aster A. puniceus Panicled Aster A. simplex Flat-topped Aster A. umbellatus Blue joint Grass Calamagrostis canadensis Marsh Marigold Caltha palustris Bicknell's Sedge Carex bicknellii Wooly Sedge C. lanuginosa White Turtle head Chelone glabra Water Hemlock Cicuta maculata False Toad flax Comandra richardsiana Small White Lady's Slipper Cypripedium candidum Showy Tick-trefoil Desmodium canadense Midland Shooting star Dodecatheon meadia Common Horsetail Equisetum arvense Joe-Pye Weed Eupatorium maculatum Boneset E. perfoliatum White Camas Figadenus elegans Queen of the Prairie Filipendula rubra Wild Strawberry Fragaria virginiana Northern Bedstraw Galium boreale Bottle Gentian Gentiana andrewsii

Sneezeweed Helenium autumnale Sawtooth Sunflower Helianthus grosseserratus Sweet Grass Hierchloe odorata Yellow Stargrass Hypoxis hirsuta Blue Flag Iris Iris versicolor Wild Blue Flag Iris I.virginica var. shrevei Path Rush Juncus tenuis Showy Vetchling Lathyrus venosus Prairie Blazing star Liatris pycnostachya Marsh Blazing star L. spicata Michigan Lily Lilium michiganense Wood Lily L. philadelphicum Cardinal Flower Lobelia cardinalis Great Blue Lobelia L. siphilitica Pale Spiked Lobelia L. spicata Prairie Loose strife Lysimachia quadriflora Wild Bergamot Monarda fistulosa Mat Muhlygrass Muhlenbergia richardonis Prairie Sundrops Oenothera pilosella Primrose O. rhomiboides Cowbane Oxypolis rigidior Switch Grass Panicum virgatum Marsh Betony Pedicularis lanceolata Prairie Phlox Phlox pilosa False Dragonhead Physostegia virginiana White Fringed Orchid Platanthera leucophaea Western White Fringed Orchid P. praeclara Purple Fringed Orchid P. psycodes Mountain Mint Pycnanthemum virginianum Bristly Buttercup Ranunculus pensylvanicus Grayheaded Coneflower Ratibida pinnata Black-eyed Susan Rudbeckia hirta

Sweet Coneflower R. subtomentosa Swamp Saxifrage Saxifraga pensylvanica Great Bulrush Scirpus validus Prairie Dock Silphium terebinthinaceum Riddell's Goldenrod Solidago riddellii Prairie Cord Grass Spartina pectinata Nodding Lady Tresses Spiranthes cernua Meadow Sweet Spirea alba Steeple Bush S. tomentosa Tall Meadow Rue Thalictrum dasycarpum Prairie Spiderwort Tradescantia bracteata Ohio Spiderwort T. ohiensis Blue Vervain Verbena hastata Ironweed Vernonia fasciculata Culver's Root Veronicastrum virginicum Blue Marsh Violet Viola nephrophylla Heart leaved Golden Alexander Zizia aptera Golden Alexander Z. aurea







Pasque Flower



Rattlesnake Master

PLANTS OF DRY PRAIRIES

Many dry prairies in the eastern grasslands are often found on steep hillsides or rocky areas that are not economically feasible to develop. Moving westward, dry prairies are more common in general due to the lower rainfall, between 10 and 20 inches per year. These dry prairie communities typically have a shallow soil profile, with a thin layer of organic matter and sandy, well-drained soil with low water-holding capacity. In western areas of the shortgrass prairie, evapotranspiration exceeds precipitation and can cause salts to accumulate in a hard layer three to six feet below the surface. This hardpan of limestone-like calcium carbonate causes the soil to be more alkaline and may be a distinguishing characteristic of the dry prairie community in the shortgrass prairie. This condition is rarely found in the tallgrass prairie, even in dry sites because the rainfall is adequate. Species composition varies in the dry prairie, depending on the soil, geography, topography, and climate. Typical plants found growing in the dry prairie community are:

Canada Wildrye Elymus canadensis

Western Wheat Grass Agropyron smithii Praire Onion Allium stellatum Lead plant Amorpha canescens Big Bluestern Andropogon gerardi Caroliana Anemone Anemone caroliniana Thimble Flower A. cylindrica Pussy toes Antennaria neglecta Lyre-leaved Rockcress Arabis lyrata Beach Wormwood Artemisia caudata Prairie Sage A. ludoviciana Blunt-leaved Milkweed Asclepias amplexicaulis Green Milkweed A. hirtella Oval-leaved Milkweed A. ovalifolia Butterly Flower A. tuberosa Whorled Milkweed A. verticillata Short-green Milkweed A. viridiflora Heath Aster Aster ericoides Smooth Aster A. laevis Aromatic Aster A. oblongifolius Sky Blue Aster A. oolentangiensis syn. [Aster azureus] Silky Aster A. sericeus Ground Plum Astragalus crassicarpus Downy Wood Mint Blephilia ciliata Sideoats Grama Bouteloua curtipendula Blue Grama B. gracilis Hairy Grama B. hirsuta Buffalo Grass Buchloe dactyloides Sand Reed Grass Calamovilfa longifolia Harebell Campanula rotundifolia Pennsylvania Sedge Carex pensylvanica Yellow Paint Brush Castilleja sessiliflora Partridge Pea Chamaecrista fasciculata Coreopsis Coreopsis palmata White Praire Clover Dalea candidum syn. [Petalostemum candidum] Purple Prairie Clover D. purpureum svn. [Petalostemum purpureum] Silky Prairie Clover D. villosum syn. [Petalostemum villosum] Prairie Larkspur Delphinium virescens Illinois Tick-trefoil Desmodium illinoense Pale Purple Coneflower Echinacea angustifolia

Purple Love Grass Eragrostis spectabilis Rattlesnake Master Eryngium yuccifolium Flowering Spurge Euphorbia corollata Downy Gentian Gentiana puberula Prairie Smoke Geum triflorum Mock Pennyroyal Hedeoma hispida Longleaf Bluet Hedyotis longifolia syn. [Houstonia longifolia] Showy Sunflower Helianthus laetiflorus Downy Sunflower H. mollis Oxeve Heliopsis helianthoides Golden Aster Heterothera villosa syn. [Chrysopsis villosa] Alumroot Heuchera richardsonii Hairy Hawkweed Hieracium longipilum False Heather Hudsonia tomentosa Path Rush Juncus tenuis Junegrass Koeleria macrantha syn. [Koeleria cristata] False Boneset Kuhnia eupatoricoides Rough Blazing star Liatris aspera Cylindric Blazing star L. cylindrica Dotted Blazing star L. punctata Hoary Puccoon Lithospermum canescens Caroliana Puccoon L. caroliana Pale Spiked Lobelia Lobelia spicata Wild Lupine Lupinus perennis Wild Bergamot Monarda fistulosa Dotted Mint M. punctata Muhly Grass Muhlunbergia sp. Primrose Oenothera rhomiboides Prairie Primrose O. rhomiboides Brittle Prickly Pear Opuntia fragilis Prickly Pear O. humifusa Long stalked Panic Grass Panicum perlongum White Penstemon Penstemon albidus Smooth Penstemon P. digitalis Slender Penstemon P. gracilis Showy Penstemon P. grandiflorus Pale Penstemon P. pallidus Seneca Snakeroot Polygala senega Prairie Cinquefoil Potentilla arguta Prairie Turnip Psoralea esculenta

Scurf Pea P. tenuiflora Pasque Flower Pulsatilla patens syn. [Anemone patens] Prairie Buttercup Ranunculus rhomboideus Upright Coneflower Ratibida columnifera Wild Petunia Ruellia humilis Little Bluestem Schizachyrium scoparium syn. [Andropogon scoparius] Small Skullcap Scutellaria parvula Common Blue-eyed Grass Sisyrinchium albidum Blue-eyed Grass S. campestre Gray Goldenrod Solidago nemoralis White Upland Aster S. ptarmicoides syn. [Aster ptarmicoides] Rigid Goldenrod S. rigida Rough Dropseed Sporobolus asper Prairie Dropseed S. heterolepis Porcupine Grass Stipa spartea Prairie Spiderwort Tradescantia ohiensis Hoary Vervain Verbena stricta American Vetch Vicia americana Bird's Foot Violet Viola pedata Arrow-leaved Violet V. sagittata







Grayheaded Coneflower



Big Bluestem

PLANTS OF MESIC PRAIRIES

The mesic (from the Greek meso or middle, meaning neither wet nor dry) prairie community occurs in fairly level outwash deposits, gently rolling hills, or ground moraine. In some areas loess deposits (the fine wind-deposited material) overlie glacial till. Mesic prairies have lighter soil, receive or retain less water, and have more surface drainage than wet prairies. Most are found on loam and sandy loam soils. Rainwater soaks in but doesn't collect from the surrounding area. Mesic prairies may closely resemble dry communities, but grasses grow more vigorously and there are more flower species. These are ideal growing conditions for native legumes, which enrich the soil with nitrogen for other prairie species. Disturbance by fire, mowing, or grazing is necessary to prevent invasion by brush and trees. Common plants in this type of community include:

Fragrant Hyssop Agastache foeniculum Prairie Dandelion Agoseris glauca Prairie Onion Allium stellatum Nodding Onion A. cernuum Lead plant Amorpha canescens Big Bluestem Andropogon gerardi Canada Mayflower Anemone canadensis Thimble Flower A. cylindrica Pussy toes Antennaria neglecta Spreading Dog bane Apocynum androsaemifolium Wild Columbine Aquilegia canadensis Sullivant's Milkweed Asclepias sullivantii Common Milkweed A. syriaca Butterfly Flower A. tuberosa Heath Aster Aster ericoides Smooth Aster A. laevis New England Aster A. novae-angliae Sky Blue Aster A. oolentangiensis syn [Aster azureus] Crooked-stemmed Aster A. prenanthoides Canadian Milk Vetch Astragalus canadensis White Wild Indigo Baptisia alba Wild Blue Indigo B. australis syn [Baptisia leucantha] Prairie Wild Indigo B. bracteata syn [Baptisia leucophaea] Kalm's Brome Bromus kalmii Poppy Mallow Callirhoe triangulata Harebell Campanula rotundifolia Bicknell's Sedge Carex bicknellii Mead's Sedge C. meadii Wild Senna C. hebecarpa Indian Paint Brush Castilleia coccinea New Jersey Tea Ceanothus americanus Pasture Thistle Cirsium discolor Hill's Thistle C. hillii False Toad flax Comandra palmata Coreopsis Coreopsis palmata White Prairie Clover Dalea candidum syn. [Petalostemum candidum] Purple Prairie Clover D. purpureum syn. [Petalostemum purpureum] Showy Tick-trefoil Desmodium canadense

Illinois Tick-trefoil D. illinoense

Midland Shooting star Dodecatheon meadia

Pale Purple Coneflower Echinacea anaustifolia

Purple Coneflower E. purpurea Canada Wildrye Elymus canadensis Fire Weed Epilobium angustifolium Rattlesnake Master Eryngium yuccifolium Flowering Spurge Euphorbia corollata White Camas Figadenus elegans Wild Strawberry Fragaria virginiana Northern Bedstraw Galium boreale Yellow Gentian Gentiana alba syn [Gentiana flavida] Bottle Gentian G. andrewsii Downy Gentian G. puberula Stiff Gentian Gentianella quinquefolia syn [Gentiana quinquefolia] Fringed Gentian Gentianopsis crinata syn [Gentiana crinata] Prairie Smoke Geum triflorum Wild Licorice Glycyrrhiza lepidota Longleaf Bluet Hedvotis Iongifolia syn [Houstonia longifolia] Sawtooth Sunflower Helianthus grosseserratus Showy Sunflower H. laetiflorus Maximilian Sunflower H. maximiliani Downy Sunflower H. mollis Western Sunflower H. occidentalis Oxeye Heliopsis helianthoides Golden Aster Heterothera villosa Alumroot Heuchera richardsonii Canada Hawkweed Hieracium canadense Showy Vetchling Lathyrus venosus Roundheaded Bush clover Lespedeza capitata Rough Blazing star Liatris aspera Meadow Blazing star L. ligulistylis Michigan Lily Lilium michiganense Wood Lily L. philadelphicum Hoary Puccoon Lithospermum canescens Caroliana Puccoon L. caroliana Great Blue Lobelia Lobelia siphilitica Pale Spiked Lobelia L. spicata Wild Bergamot Monarda fistulosa Dotted Mint M. punctata Violet Wood Sorrel Oxalis violacea Prairie Panic Grass Panicum leibergii Scribner Panic Grass P. oligosanthes Switch Grass P. virgatum

Wild Quinine Parthenium integrifolium Wood Betony Pedicularis canadensis Smooth Penstemon Penstemon digitalis False Dragonhead Physostegia virginiana Seneca Snakeroot Polygala senega Prairie Cinquefoil Potentilla arguta Rattlesnake Root Prenanthes racemosa Mountain Mint Pycnanthemum virginianum Prairie Buttercup Ranunculus rhomboideus Upright Coneflower Ratibida columnifera Grayheaded Coneflower R. pinnata Prairie Rose Rosa sp. Black-eyed Susan Rudbeckia hirta Little Bluestem Schizachyrium scoparium syn [Andropogon scoparius] Rosin Plant Silphium integrifolium Compass Plant S. lacinatum Cup Plant S. perfoliatum Prairie Dock S. terebinthinaceum Common-eyed Grass Sisyrinchium albidum Blue-eved Grass S. campestre Starry False Solomon's Seal Smilacina stellata Grass-leaved Goldenrod Solidago graminifolia Missouri Goldenrod S. missouriensis Rigid Goldenrod S. rigida Showy Goldenrod S. speciosa Indian grass Sorghastrum nutans Prairie Cord Grass Spartina pectinata Prairie Dropseed Sporobolus heterolepis Porcupine Grass Stipa spartea Goats rue Tephrosia virginiana Tall Meadow Rue Thalictrum dasycarpum Meadow Parsnip Thaspium trifoliatum Prairie Spiderwort Tradescantia bracteata Ohio Spiderwort T. ohiensis Hoary Vervain Verbena stricta Culver's Root Veronicastrum virginicum American Vetch Vicia americana Bird's Foot Violet Viola pedata Prairie Violet V. pedatifida Heart leaved Golden Alexander Zizia aptera Golden Alexander Z. aurea

CHARACTERISTICS OF PRAIRIE PLANTS

Key for table

Competitiveness: 1= aggressive, can compete with weedy and exotic species, easiest to establish; 2 = intermediate, not as competitive with weedy and exotic plants, slower to establish; 3 = competition sensitive, will not compete and declines or dies with weedy species and exotics.

Old fields, **disturbed sites**: Native prairie plants that can be found growing on extensively disturbed sites. These species can be tough enough to survive grazing, mowing, plowing, spraying, or some other land management practices.

Plants restricted to virgin prairies: Prairie plants found growing on virgin (not plowed or disturbed) prairie remnants. Most of these plants will not tolerate any kind of disturbance such as plowing, heavy grazing, or mowing.

Plants established by seeds or plants: Some prairie plants can be established by seeds (**S**) or (**P**) or both (**S/P**). Recommendations are based on the difficulty of germination, survival rate, growth rate, and what is currently available through nurseries. Native plants should be nursery-propagated and purchased through licensed nurseries to support the conservation of native species.

COMPETITIVENESS	OLD FIELDS, DISTURBED SITES	RESTRICTED TO VIRGIN PRAIRIES	ESTABLISHMENT	FLOWER COLOR	HEIGHT	HABITAT PREFERENCE	PERIOD OF BLOOM	COMMENTS
1	Yes	No	S/P	Purple	1-3'	Mesic	July-Aug.	Attractive dense, purple spiked flowers, aromatic flowers and leaves.
3	No	Yes	Р	Yellow	6-12"	Dry	June	Dandelion-like flowers. Rare in some areas.
2	No	No	S/P	_	16-24"	Dry	July	Most of growth occurs in spring and fall.
3	No	Yes	S/P	Pinkish	6-12"	Mesic-dry	May-June	Can't stand heavy grass competition. Needs small companions.
2	No	Yes	S/P	Pinkish	12-16"	Mesic-dry	July-Aug.	Can't stand heavy grass competition. Needs small companions.
3	No	Yes	S/P	Pinkish	12-16"	Mesic-dry	July-Aug.	Can't stand heavy grass competition. Needs small companions.
2	No	Yes	S/P	Purple	1-3'	Dry-mesic	June-July	A very showy woody shrub, grows slowy. A native legume.
1	Yes	No	S/P	-	2-6'	Mesic-dry	AugSept.	
1	No	No	Р	White	12-18"	Mesic-wet	May-July	Found growing in colonies.
3	No	Yes	Р	White to Violet	8-15"	Dry	AprMay	Showy, needs small companions, sensitive to early spring fires.
2	No	No	S/P	White	12-16"	Dry-mesic	June-July	Seedheads are interesting, needs small companions.
1	Yes	No	Р	White	4-12"	Dry-mesic	May-June	Forms solid patches.
3	Yes	No	Р	Pink	1-3'	Mesic	June-July	Small, aromatic flowers. Has milky juice like milkweed.
3	No	No	Р	Green-white	1-3'	Mesic-dry	June-Aug.	Small flowers. Has milky juice like milkweed.
2	Yes	No	S/P	Red-yellow	1-2'	Mesic	June-July	Self seeds readily. A species found in woods or prairies, very attractive.
3	No	No	Р	White	6-12"	Dry	April-May	Low growing.
	1							
	1 3 2 3 2 1 1 3 2 1 3 3 2 2	1 Yes 3 No 2 No 3 No 2 No 1 Yes 1 No 3 No 2 No 1 Yes 1 No 3 No 2 No 1 Yes 3 No 2 Yes 3 Yes	1 Yes No 3 No Yes 2 No No 3 No Yes 2 No Yes 2 No Yes 3 No Yes 2 No Yes 1 Yes No 1 No No 3 No Yes 2 No No 1 Yes No 3 No Yes 2 No No 1 Yes No 3 No Yes 2 No No 1 Yes No 3 Yes No 3 Yes No	1 Yes No S/P 3 No Yes P 2 No No S/P 3 No Yes S/P 3 No Yes S/P 2 No Yes S/P 2 No Yes S/P 2 No Yes S/P 1 Yes No S/P 1 No No P 3 No Yes P 2 No No S/P 1 Yes No P 3 Yes No P 3 Yes No P 3 Yes No P	1 Yes No S/P Purple 3 No Yes P Yellow 2 No No S/P — 3 No Yes S/P Pinkish 2 No Yes S/P Pinkish 3 No Yes S/P Purple 1 Yes No S/P — 1 No No P White 3 No Yes P White to Violet 1 Yes No P White 1 Yes No P Pink 3 Yes No P Green-white 2 Yes No S/P Red-yellow	1 Yes No S/P Purple 1-3' 3 No Yes P Yellow 6-12" 2 No No S/P — 16-24" 3 No Yes S/P Pinkish 6-12" 2 No Yes S/P Pinkish 12-16" 3 No Yes S/P Pinkish 12-16" 2 No Yes S/P Purple 1-3' 1 Yes No S/P — 2-6' 1 No No P White 12-18" 3 No Yes P White to Violet 8-15" 2 No No S/P White 12-16" 1 Yes No P White 4-12" 3 Yes No P Pink 1-3' 3 No No P Green-white 1-3' 2 Yes No S/P Red-yellow 1-2'	1 Yes No S/P Purple 1-3' Mesic 3 No Yes P Yellow 6-12" Dry 2 No No S/P — 16-24" Dry 3 No Yes S/P Pinkish 6-12" Mesic-dry 2 No Yes S/P Pinkish 12-16" Mesic-dry 3 No Yes S/P Pinkish 12-16" Mesic-dry 2 No Yes S/P Purple 1-3' Dry-mesic 1 Yes No S/P Purple 1-3' Mesic-dry 1 No No P White 12-18" Mesic-wet 3 No Yes P White to Violet 8-15" Dry 2 No No S/P White 12-16" Dry-mesic 1 Yes No P White 4-12" Dry-mesi	1 Yes No S/P Purple 1-3' Mesic July-Aug. 3 No Yes P Yellow 6-12" Dry June 2 No No S/P — 16-24" Dry July 3 No Yes S/P Pinkish 6-12" Mesic-dry May-June 2 No Yes S/P Pinkish 12-16" Mesic-dry July-Aug. 3 No Yes S/P Pinkish 12-16" Mesic-dry July-Aug. 2 No Yes S/P Purple 1-3' Dry-mesic June-July 1 Yes No S/P Purple 1-2-16" Mesic-wet May-July 1 Yes No P White 12-18" Mesic-wet May-July 3 No Yes P White 12-16" Dry-mesic June-July 1 Yes No

Artemisia ludoviciana	3	Yes	No	S/P	Green/white	1-3'	Dry-Mesic	July-Aug.	Attractive foliage all year.
Prairie Sage	2	No	Voc	C/D	Croon/purple	1.01	Dmr	luna lulu	Calf and a readily ware in some areas
Asclepias amphexicaulis Blunt-leaved Milkweed	2	No	Yes	S/P	Green/purple	1-2'	Dry	June-July	Self seeds readily, rare in some areas.
Asclepias hirtella Green Milkweed	3	No	Yes	S/P	Green/white	1-2'	Dry	June-Aug.	Tall, subtle flowers.
Asclepias incarnata Swamp Milkweed	1	Yes	No	S/P	Pink	2-4'	Wet-mesic	July-Aug.	Aggressive, needs competition. Good for attracting monarch butterflies.
Asclepias ovalifolia Oval-leaved Milkweed	3	No	Yes	S/P	White	10-24"	Dry	June-July	Subtle flowers.
Asclepias sullivantii Sullivant's Milkweed	3	No	Yes	Р	Purple/pink	2-4'	Mesic	July	Unusual waxy leaves.
Asclepias syriaca	1	Yes	No	S/P	Pink	2-4'	Dry-mesic	July-Aug.	Nodding flower heads.
Asclepias tuberosa	3	No	No	S/P	Orange	1-2'	Dry-mesic	July-Aug.	Highly desirable, very showy! Attracts
Butterfly Flower Asclepias verticillata	1	Yes	No	S/P	White	12-24"	Dry-mesic	July-Aug.	monarch butterflies May become aggressive under moist
Whorled Milkweed Asclepias viridiflora	3	No	Yes	Р	Green/white	1-2'	Dry-mesic	June-July	conditions. Subtle flowers.
Short-green Milkweed Aster ericoides	1	Yes	No	S/P	White	1-3'	Dry-mesic	AugSept.	Can become aggressive and weedy,
Heath Aster Aster laevis	2	No	No	S/P	Blue	1-3'	Dry-mesic	July-Sept.	needs competition. Moderately showy.
Smooth Aster Aster novae-angliae	1	Yes	No	S/P	Purple	1-6'	Wet-mesic	AugOct.	Tall, very showy, can become
New England Aster Aster oblongifolius	3	No	No	P	Purple	1-2'	Dry	SeptOct.	aggressive. Moderately showy.
Aromatice Aster Aster oolentangiensis	2	Yes	No	S/P	Blue	1-4'	Mesic-dry	SeptOct.	Needs competition, self seeds readily.
syn [Aster azureus] Sky Blue Aster									An attractive fall flower display.
Aster prenanthoides Crooked-stemmed Aster	3	No	No	S/P	Pink/ white	2-3'	Wet-mesic	AugSept.	Great for wet areas.
Aster puniceus Purple-stemmed Aster	1	No	No	S/P	White	2-5'	Wet-mesic	AugSept.	Aggressive, great for wet areas.
Aster sericeus Silky Aster	2	No	No	S/P	Purple	1-2'	Dry	AugSept.	Attractive flowers and foliage.
Aster simplex Panicled Aster	1	No	No	S/P	White	2-4'	Wet	AugOct.	Aggressive, great for wet areas.
Aster umbellatus Flat-topped Aster	1	No	No	S/P	White	2-5'	Wet-mesic	July-Aug.	Aggressive, great for wet areas.
Astragalus canadensis Canadian Milk Vetch	1	No	No	S/P	White	1-3'	Dry-mesic	July-Aug.	Aggressive, spreads fast.
Astragalus crassicarpus Ground Plum	3	No	Yes	Р	White	6-12"	Dry	May-June	A delicate plant, fruit is interesting, needs small companions.
Baptisia alba White Wild Indigo	2	No	Yes	Р	White	2-4'	Mesic-dry	June-July	A native legume, very attractive foliage and flowers.
Baptisia australis syn [Baptisia leucantha] Wild Blue Indigo	1	No	Yes	S/P	Blue	2-5'	Mesic	June-July	A native legume, very attractive foliage and and flowers.
Baptisia bracteata syn [Baptisia leucophaea] Praire Wild Indigo	2	No	Yes	S/P	Yellow	1-2'	Mesic-dry		A native legume, needs small companions for support.
Blephilia ciliata Downy Wood Mint	3	No	No	Р	Purple	12-24"	Mesic-dry	June-July	Short, compact growth.
Bouteloua curtipendula Sideoats Grama	2	No	No	S/P	_	1-3'	Dry	July-Sept.	Moderately aggressive, a bunch grass that self seeds readily, no fall color.
Bouteloua gracilis Blue Grama	2	No	No	S/P	_	12-18"	Dry	July-Sept.	A bunch grass with no fall color, seed heads are interesting.
Bouteloua hirsuta Hairy Grama	2	No	No	S/P	_	12-18"	Dry	July-Sept.	A bunch grass with no fall color, seed heads are interesting.
Bromus kalmii Kalm's Brome	2	No	Yes	S/P	_	1-3'	Dry-mesic	AugSept.	Prefers calcareous soils, no fall color.
Buchloe dactyloides Buffalo Grass	2	Yes	No	Р	_	6-12"	Dry	July	A short grass that grows thick like sod.
Calamagrostis canadensis Blue joint Grass	1	No	No	Р	_	2-5'	Wet	July-Aug.	Forms solid clumps.
Calamovilfa longifolia Sand Reed Grass	1	No	Yes	Р	_	4-5'	Dry-mesic	July-Aug.	Attractive fall color.
Callirhoe triangulata Poppy Mallow	2	No	Yes	Р	Red/ purple	1-2'	Dry-mesic	June-Aug.	Rare in some areas.
Caltha palustris Marsh Marigold	3	No	No	Р	Yellow	12-24"	Wet	May	Needs plenty of moisture.
Campanula rotundifolia Harebell	3	No	No	Р	Blue	6-12"	Dry-mesic	July-Aug.	Self seeds readily, needs good drainage.
Carex bicknellii Bicknell's Sedge	1	No	No	Р	-	12"	Mesic-wet	May-July	Grows in clumps.
Carex meadii Mead's Sedge	1	No	No	Р	_	12-16"	Mesic-wet	May-June	Grows in calcareous soils.
Carex pensylvanica Pennsylvania Sedge	1	No	No	Р	_	6-12"	Mesic-dry	May-June	Can tolerate semi-shady areas.
Cassia hebecarpa Wild Senna	3	No	Yes	Р	Yellow	3-6'	Mesic	July-Aug.	A native legume.
Castilleja coccinea Indian Paint Brush	3	No	Yes	S	Red	1-2'	Mesic	June-Aug.	Annual or biennial, semi-parasitic on other plant roots.
mulan i anti biusii									10003.

Castilleja sessiliflora	3	No	Yes	S	Yellow	1-2'	Dry	July	Annual or biennial, semi-parasitic on other plant roots.
Yellow Paint brush Ceanothus americanus	2	Yes	No	Р	White	1-3'	Dr. mania	luno luly	Attractive woody shrub.
New Jersey Tea	2	res	INO	Р	vvnite	1-3	Dry-mesic	June-July	Attractive woody shrub.
Chamaecrista fasciculata	3	No	No	S/P	Yellow	6-24"	Dry	July-Aug.	A native legume, annual.
syn [Cassia fasciculata]									
Partridge Pea Chelone glabra	3	No	No	Р	White	2-3'	Wet-mesic	Aug.	Flower heads resembles "turtles".
White Turtle head	3	140	140		VVIIIC	2-5	vvct mosic	Aug.	Trower reads resembles turtles .
Cicuta maculata	3	Yes	No	Р	White	3-5'	Wet-mesic	June-Aug.	Poisonous.
Water Hemlock Cirsium discolor	3	Yes	No	Р	Purple	2-5'	Mesic	AugSept.	Large, attractive flowers.
Pasture Thistle	3	162	INO		Fulple	2-5	Mesic	AugSept.	Large, attractive nowers.
Cirsium hillii	3	Yes	No	Р	Purple	1-2'	Mesic-dry	June	Biennial. Large attractive flowers.
Hill's Thistle	2	V	NI-	P	\A/I=:4-	0.101	\A/-+:-	Lower Later	
Comandra palmata False Toad flax	3	Yes	No	Р	White	6-12"	Wet-mesic	June-July	Flowers are inconspicuous, semi-parasitic on on other plant roots.
Coreopsis palmata	2	Yes	No	Р	Yellow	1-3'	Mesic	June-Aug.	Showy, attractive flowers, self seeds readily.
Coreopsis	_								
Cypripedium candidum Small White Lady's Slipper	3	No	Yes	NA	White	1 0-16"	Wet-mesic	May-June	Sensitive to competition, low growing. Very difficult to establish
Dalea candidum	2	No	Yes	S/P	White	1-3'	Dry-mesic	July-Aug.	A native legume, attractive foliage and flowers.
[Petalostemum candidum]									
White Praire Clover Dalea purpureum	2	No	Yes	S/P	Purple	1-3'	Dry	July-Aug.	A native legume, attractive foliage and flowers.
syn [Petalsotemum purpureum]		INO	165	3/F	ruipie	1-3	DIY	July-Aug.	A hative legume, attractive lonage and nowers.
Purple Praire Clover (on cover)									
Dalea villosum	2	No	Yes	S/P	Purple	1-3'	Dry	July-Aug.	A native legume, attractive foliage and flowers.
syn [Petalostemum villosum] Silky Praire Clover									
Delphinium virescens	3	No	Yes	S/P	White	1-3'	Dry-mesic	June-July	Sensitive to hot weather, may die-back during droughts,
Praire Larkspur									re-growth in cool weather.
Desmodium canadense Showy Tick-trefoil	1	Yes	No	S/P	Purple	1-4'	Wet-mesic	July-Aug.	A native legume, aggressive, flowers are showy.
Desmodium illinoense	1	Yes	No	S/P	White-pink	1-2'	Mesic	July-Aug.	A native legume, sometimes aggressive, needs competition
Illinois Tick-trefoil									
Dodecatheon meadia	2	No	Yes	Р	White to pink	12"	Wet-dry	May-June	Very showy, sensitive to spring fires. Can tolerate some
Midland Shooting star Echinacea angustifolia	1	No	Yes	S/P	Purple	2-3'	Mesic-dry	June-July	some shade. Aggressive, needs competition.
Pale Purple Coneflower	·				, arpro			ouno oun,	riggiocore, ricede competition
Echinacea purpurea	1	Yes	No	Р	Purple	2-4'	Mesic-dry	June-Sept.	A native legume, attractive foliage and flowers.
Purple Coneflower Elymus canadensis	1	Yes	No	Р		2-4'	Mesic	July-Aug.	More aggressive on warmer, moist sites,
Canada Wildrye		103	140	,			Wicsio	outy riag.	may gradually disappear.
Equisetum arvense	1	Yes	No	S/P	-	2-3'	Wet-mesic	May	Can become aggressive.
Common Horsetail Epilobium angustifolium	1	Yes	No	S/P	Pink	2-5'	Mesic	July-Aug.	Tall, bushy, very attractive flowers.
Fire Weed		163	140	3/1	THIK	2-5	IVIESIC	July-Aug.	rail, busily, very attractive nowers.
Eragrostis spectabilis	1	Yes	No	S/P	_	1-2'	Dry	July-Sept.	Delicate, attractive seedheads.
Purple Love Grass Eryngium yuccifolium	1	No	No	S/P	White	2-4'	Mesic-dry	July-Aug.	Aggregative on moint sites, attractive goodhoods
Rattlesnake Master	l '	INO	INO	3/F	vvnite	2-4	wesic-ary	July-Aug.	Aggressive on moist sites, attractive seedheads.
Eupatorium maculatum	1	No	No	S/P	Pink	3-5'	Wet-mesic	July-Aug.	Usually grows in large colonies.
Joe-Pye Weed		NI	NI	C/D	\A/I- '-	0.51	10/-4	Later Acces	
Eupatorium perfoliatum Boneset	2	No	No	S/P	White	3-5'	Wet-mesic	July-Aug.	Usually grows in large colonies.
Euphorbia corollata	2	Yes	No	S/P	White	1-3'	Dry-mesic	June-Aug.	Moderately showy flowers, self seeds readily.
Flowering Spurge				0.0	B: 1	0.01	147		
Filipendula rubra Queen of the Prairie	2	No	Yes	S/P	Pink	3-6'	Wet-mesic	June-Aug.	Uncommon, a large and showy plant.
Fragaria virginiana	1	Yes	No	Р	White	6-12"	Wet-mesic	May-June	Fruit attractive to birds. Leaves turn red in fall.
Wild Strawberry									
Galium boreale Northern Bedstraw	2	Yes	No	S/P	White	1-2'	Wet-mesic	June-Aug.	Self seeds readily, a good ground cover.
Gentiana alba	3	No	Yes	Р	White-yellow	1-2'	Wet-mesic	SeptOct.	Petals stay closed, sensitive to heavy grass competition.
syn [Gentiana flavida]									
Yellow Gentian Gentiana andrewsii	3	No	No	Р	Blue	1-2'	Wet-mesic	SeptOct.	Petals stay closed, sensitive to heavy grass competition.
Bottle Gentian	3	INO	INO		blue	1-2	vvet-mesic	зеріОсі.	retais stay closed, sensitive to heavy grass competition.
Gentiana puberula	3	No	Yes	Р	Blue	1-2'	Dry-mesic	SeptOct.	Low growing habit, petals open, rare in most areas.
Downy Gentian	2	Nia	Vaa	C/D	Dive	1.01	\M/a+i-	C+ O-+	Details steer also and association to be a second association.
Gentianella quinquefolia syn [Gentiana quinquefolia]	3	No	Yes	S/P	Blue	1-2'	Wet-mesic	SeptOct.	Petals stay closed, sensitive to heavy grass competition.
Stiff Gentian									
Gentianopsis crinata	3	No	Yes	S/P	Blue	1-2'	Wet-mesic	SeptOct.	Petals open, rare in most areas.
[Gentiana crinata] Fringed Gentian									
Geum triflorum	3	No	No	Р	Red	6-12"	Dry-mesic	April-May	Sensitive to spring fires and heavy grass
Prairie Smoke				_					competition, attractive in mass.
Glycyrrhiza lepidota Wild Licorice	3	No	Yes	Р	Cream	2-3'	Mesic-dry	June-July	A native legume.
Platanthera praeclara	3	No	Yes	NA	White	1-3'	Wet-mesic	June-July	Very difficult to establish.
syn [Habenaria leucopaea]			11/202						
White Fringed Orchid									

Platanthera psycodes	3	No	Yes	NA	Purple	1-3'	Wet-mesic	June-July	Very difficult to establish.	
syn [Habenaria psycodes] Purple Fringed Orchid										
Hedeoma hispida	3	No	No	Р	Blue	2-12"	Dry	June-Aug.	Annual, low growing.	
Mock Pennyroyal Hedyotis longifolia	3	No	No	P	Blue	4-12"	Dry	June-Oct.	Needs small companions, rare in some areas.	
syn [Houstonia longifolia]	-						,			
Longleaf Bluet Helenium autumnale	2	Yes	No	S/P	Yellow	2-5'	Wet-mesic	AugSept.	Numerous flowers, usually found in large colonies.	
Sneezeweed		103	140		Tellovv		vvot mosic	Aug. ocpt.	14differed s flowers, askerny found in large colonies.	
Helianthus grosseserratus Sawtooth Sunflower	1	Yes	No	S/P	Yellow	4-7'	Wet-mesic	AugOct.	Can become weedy. Very easy to establish.	
Helianthus laetiflorus	1	Yes	No	S/P	Yellow	2-6'	Mesic	AugOct.	Establishes quickly, needs competition. Tall	
Showy Sunflower			,,,,,,,,,,				JACK 1995 3-51-54 July 2		attractive flowers.	
Helianthus maximiliani Maximilian Sunflower	1	Yes	No	S/P	Yellow	2-5'	Mesic	July-Oct.	Aggressive.	
Helianthus mollis	1	Yes	No	S/P	Yellow	2-3'	Dry-mesic	AugSept.	Very easy to establish.	
Downy Sunflower Helianthus occidentalis	1	Yes	No	S/P	Yellow	2-6'	Mesic-dry	AugOct.	Large, showy flowers.	
Western Sunflower	'	165	INO	3/1	renow	2-0	Wesic-ury	AugOct.	Large, snowy nowers.	
Heliopsis helianthoides	1	No	No	S/P	Yellow	2-6'	Mesic	July-Sept.	Showy flowers, grows in colonies.	
Oxeye Heterothera villosa	1	Yes	No	S/P	Yellow	1-2'	Dry-mesic	July-Oct.	Self seeds easily, can become aggressive	
syn [Chrysopsis villosa]								,	on moist sites.	
Golden Aster Heuchera richardsonii	3	No	Yes	P	Greenish	1-2'	Dry-mesic	May-June	Small, delicate flowers, leaves turn red in fall.	
Alumroot									Needs small companions.	
Hieracium canadense Canada Hawkweed	2	No	No	S/P	Yellow	2-4'	Mesic	July-Sept.	Moderately attractive flowers, self seeds readily.	
Hieracium longipilum	2	No	No	S/P	Yellow	2-4'	Dry	July-Aug.	Prefers sandy areas.	
Hairy Hawkweed Hierchloe odorata	2	No	No	P	_	1-2'	Wet-mesic	May-June	Aromatic leaves.	
Sweet Grass	2	INO	INO	, r	_	1-2	vvet-mesic	May-June	Aromatic leaves.	
Hudsonia tomentosa	3	No	No	Р	Yellow	4-12"	Dry	May-June	Prostrate growth habit.	
False Heather Hypoxis hirsuta	3	No	Yes	Р	Yellow	4-12"	Wet-mesic	May-July	Delicate flowers, needs small companions.	
Yellow Stargrass					5.	0.01	144			
Iris versicolor Blue flag Iris	2	No	No	Р	Blue	2-3'	Wet-mesic	June-July	Grows in large colonies.	
Iris virginica var. shrevei	2	No	No	Р	Blue	1-2'	Wet-mesic	May-July	Grows in large colonies.	
Wild Blue flag Iris Juncus tenuis	2	No	No	S/P	_	6-12"	Wet-dry	June	Can be found on compacted soil.	
Path Rush									To the to the control of the total of the to	
Koeleria macrantha syn [Koeleria cristata] Junegrass	3	No	No	S/P	_	1-2'	Dry	May-July	Very attractive flowers and seedheads, can't tolerate heavy grass competition.	
Kuhnia eupatorioides	1	No	No	S/P	Cream	2-4'	Dry	AugSept.	Aggressive, can become aggressive on moist sites	
False Boneset Lathyrus venosus	1	Yes	No	S/P	Purple	2-4'	Wet-mesic	June-July	Attractive, showy flowers.	
Showy Vetchling	ļ '	103	140		rarpic		vvct mosic	Julie July	Attractive, snowy nowers.	
Lespedeza capitata Roundheaded Bush clover	2	Yes	No	S/P	Cream	2-5'	Dry-mesic	AugSept.	A native legume, seedheads are very attractive.	
Liatris aspera	2	No	Yes	S/P	Purple	1-4'	Mesic-dry	AugSept.	Great for attracting monarch butterflies.	
Rough Blazing star Liatris cylindrica	2	No	Yes	Р	Purple	6-12"	Dry	AugSept.	Needs small companions for support.	
Cylindric Blazing star	4	INO	res		Purple	0-12	Dry	AugSept.	Rare in some areas.	
Liatris ligulistylis	2	No	Yes	S/P	Purple	2-4'	Mesic-dry	AugSept.	Great for attracting monarch butterflies.	
Meadow Blazing star Liatris punctata	2	No	Yes	Р	Purple	1-2'	Dry	SeptOct.	Needs small companions for support.	
Dotted Blazing star				0.15						
Liatris pycnostachya Prairie Blazing star	2	No	Yes	S/P	Purple	2-4'	Wet-mesic	July-Aug.	Showy, spectacular summer display of purple flowers.	
Liatris spicata	2	No	Yes	P	Purple	2-4'	Wet-mesic	AugSept.	Attractive flowers, needs companions for support.	
Marsh Blazing star Lilium michiganense	3	No	Yes	P	Orange	2-6'	Wet-mesic	June-July	Rare in most areas, large attractive flowers.	
Michigan Lily								,		
Lilium philadelphicum Wood Lily	3	No	Yes	Р	Orange	1-3'	Mesic-wet	June-Aug.	Rare in most areas, large attractive flowers.	
Lithospermum canescens	3	No	Yes	NA ·	Yellow	1-2'	Dry-mesic	May-June	Attractive flowers and foliage, rare in some areas.	
Hoary Puccoon Lithospermum caroliana	3	No	Von	NA	Yellow/orange	1-2'	Dru masia	May lung	Attractive flowers and foliage, rare in some areas.	
Caroliana Puccoon	3	No	Yes	INA	reliow/orange	1-2	Dry-mesic	May-June		
Lobelia cardinalis	3	No	No	S/P	Red	2-5'	Wet-mesic	AugSept.	Tall growth habit, brilliant red flowers,	
Cardinal Flower Lobelia siphilitica	3	No	No	S/P	Blue	1-3'	Wet-mesic	AugSept.	attracts hummingbirds. Short-lived. Can tolerate partial shade.	
Great Blue Lobelia									•	
Lobelia spicata Pale Spiked Lobelia	2	No	No	S/P	Blue	1-2'	Mesic-dry	June-Sept.	Blooms for a long time.	
Lupinus perennis	2	No	Yes	S/P	Blue	1-2'	Dry-mesic	May-June	A native legume, very attractive flowers.	
Wild Lupine Lysimachia quadriflora	2	No	No	Р	Yellow	1-2'	Wet-mesic	July-Aug.	Grows in large colonies.	
Prairie Loose strife										
Monarda fistulosa Wild Bergamot	3	Yes	No	S/P	Violet	2-3'	Wet-dry	July-Aug.	Needs competition, very attractive flowers.	
TVIIG Dergaillot										

Monarda punctata	3	Yes	No	S/P	Violet-white	1-3'	Dry-mesic	July-Sept.	The flower bracts are very attractive, not the petals.
Dotted Mint Muhlunbergia racemosa	2	No	No	Р	_	1-2'	Dry	June-July	Beautiful in masses. A great companion for other low growing species.
Green Muhly Grass	-		111111111111111111111111111111111111111		V 11			,	
Oenothera pilosella Prairie Sundrops	3	No	No	Р	Yellow	2-3'	Wet-dry	July-Aug.	Flowers bloom for a short time.
Oenothera rhomiboides	3	No	No	Р	Yellow	2-3'	Wet-dry	July-Aug.	Flowers bloom for a short time.
Primrose Opuntia fragilis	3	No	Yes	Р	Yellow	3-6"	Dry	May-June	Unusual, low growing, rare in some areas.
Brittle Prickly Pear Opuntia humifusa	3	No	Yes	Р	Yellow	3-6"	Dry	June-July	Unusual, low growing, rare in some areas.
Prickly Pear Oxalis violacea		NI-	NI-	NIA	Violet	12"	Davisassis	May-June	Very attractive flowers, a good companion for
Violet Wood Sorrel	3	No	No	NA	violet	12	Dry-mesic		short species.
Oxypolis rigidior Cowbane	3	Yes	No	S/P	White	2-5'	Wet-mesic	AugSept.	Poisonous.
Panicum leibergii	1	No	Yes	NA	_	1-2'	Mesic	July	Grows in clumps.
Prairie Panic Grass Panicum oligosanthes	1	No	No	NA	_	1-2'	Dry-mesic	June-July	Grows in clumps.
Scribner Panic Grass Panicum perlongum	1	No	No	NA	_	10-24"	Dry	June-July	Grows in clumps.
Long stalked Panic Grass		J- 75.7	.700			100	·		
Panicum virgatum Switch Grass	1	Yes	No	S/P	_	3-5'	Dry-mesic	July-Sept.	Grows in clumps, can become aggressive in moist areas.
Parthenium integrifolium Wild Quinine	3	No	No	Р	White	2-3'	Dry-mesic	June-Aug.	Attractive foliage.
Pedicularis canadensis	3	No	No	Р	Yellow	6-12"	Mesic-dry	May-June	Flowers are very attractive, parasitic on
Wood Betony Pedicularis lanceolata	3	No	No	P	Yellow	1-2'	Wet	July-Aug.	other plant roots. Flowers are very attractive, parasitic on
Marsh Betony		4075337	1000.00		0.50000000000	27.77	\$20 par 60 50 50		other plant roots.
Penstemon albidus White Penstemon	3	No	Yes	Р	White	12-16"	Dry-mesic	May	Self seeds readily.
Penstemon digitalis Smooth Penstemon	3	No	Yes	Р	White	2-3'	Mesic	June-July	Numerous, white flowers, leaves turn red in fall.
Penstemon gracilis	3	No	Yes	Р	Pink	6-12"	Dry-mesic	May-June	Very attractive flowers, self seeds readily.
Slender Penstemon Penstemon grandiflorus	3	No	No	S/P	Pink	2-3'	Dry-mesic	July-Aug.	Very attractive flowers, self seeds readily.
Showy Penstemon Penstemon pallidus	3	No	Yes	P	Pink	1-3'	Dry	May-June	Very attractive flowers, self seeds readily.
Pale Penstemon		50,000,000,0	9.1-5.1761		1 22.554	2. 559.	25340		THE COLUMN TO THE STATE OF THE
Phlox pilosa Prairie Phlox	2	No	Yes	Р	Pink	1-3'	Wet-mesic	May-July	A vigorous grower.
Physostegia virginiana False Dragonhead	2	No	No	S/P	Pink	2-3'	Wet-Mesic	AugSept.	Tall, spike-like flowers.
Polygala senega	3	No	Yes	Р	White	12-20"	Dry-mesic	May-June	Unusual, attractive flowers and growth habit.
Seneca Snakeroot Potentilla arguta	3	No	No	S/P	Yellow	2-3'	Mesic-dry	June-July	Unusual, delicate foliage.
Prairie Cinquefoil Prenanthes racemosa	3		No	S/P		2-4'			Seedheads resemble Liatris.
Rattlesnake Root	3	No	INO		Violet		Mesic-dry	AugSept.	2000 (100 (100 (100 (100 (100 (100 (100
Psoralea esculenta Prairie Turnip	3	No	Yes	S/P	Blue	12-24"	Dry	June-July	A native legume, delicate and attractive flowers, rare in some areas.
Psoralea tenuiflora	3	No	Yes	S/P	Blue	12-24"	Dry	June-July	A native legume, delicate and attractive flowers,
Scurf Pea Pulsatilla patens	3	No	Yes	Р	White-violet	4-12"	Dry-mesic	May-June	rare in some areas. Needs small companions, can't tolerate heavy
syn [Anemone patens] Pasque Flower (on cover)								,	grass competition. Feather-like seed heads.
Pycnanthemum virginianum	1	Yes	No	Р	White	2-3'	Wet-mesic	AugSept.	Aromatic foliage and flowers.
Mountain Mint Ranunculus pensylvanicus	1	Yes	No	Р	Yellow	1-2'	Wet	July-Aug.	Not competition sensitive.
Bristly Buttercup Ranunculus rhomboideus	1	No	No	P	Yellow	6-12"	Dry-mesic	April-May	Not competition sensitive.
Prairie Buttercup									
Ratibida columnifera Upright Coneflower	2	No	No	S/P	Yellow	1-4'	Dry-mesic	July-Aug.	Needs competition, self seeds readily.
Ratibida pinnata	1	Yes	No	S/P	Yellow	2-6'	Mesic-wet	July-Aug.	Aggressive, tall, and showy. Needs competition,
Grayheaded Coneflower Rosa sp.	1	Yes	No	Р	Pink	1-4'	Dry-mesic	June-July	self seeds readily. Very large, showy flowers, rose hips are
Praire Rose Rudbeckia hirta	1	Yes	No	S/P	Yellow	1-2'	Wet-mesic	July-Aug.	attractive in fall. Short lived perennial that self seeds readily.
Black-eyed Susan		1.00		<u> </u>					·
Rudbeckia subtomentosa Sweet Coneflower	1	No	Yes	P	Yellow	3-4'	Wet-mesic	July-Aug.	Tall, branched with small attractive flowers.
Ruellia humilis	2	No	No	Р	Violet	6-12"	Dry	July-Aug.	Blooms for a short time.
Wild Petunia Saxifraga pensylvanica	3	No	Yes	P	Green	2-3'	Wet-mesic	May-June	Tall, plants with long stalks, small flowers.
Swamp Saxifrage		5.000		NIA					
Scutellaria parvula Small Skullcap	3	No	Yes	NA	Blue	6-12"	Dry-mesic	June-July	Small flowers.
Schizachyrium scoparium syn [Andropogon scoparius] Little Bluestem	2	Yes	No	S/P	_	1-3'	Dry-mesic	AugSept.	A short prairie grass that grows in clumps, attractive reddish fall color.
Scirpus validus	1	Yes	No	S/P	_	2-6'	Wet-mesic	May-June	Often grows in large colonies.
Great Bulrush									

Silphium integrifolium	1	No	No	S/P	Yellow	2-5'	Dry-mesic	July-Aug.	Tall, coarse, aggressive.
Rosin Plant			74.555.0	10,100		386 96			
Silphium lacinatum Compass Plant	1	No	No	S/P	Yellow	3-8'	Mesic-dry	June-Aug.	Very tall, attractive flowers, leaves orient with the sun.
Silphium perfoliatum Cup Plant	1	No	No	S/P	Yellow	2-6'	Mesic	July-Sept.	Interesting shaped leaves trap water.
Silphium terebinthinaceum Prairie Dock	1	No	No	S/P	Yellow	4-8'	Mesic-wet	July-Sept.	The tallest prairie flower, basal leaves reach 2' in diameter.
Sisyrinchium albidum Common Blue-eyed Grass	3	No	Yes	Р	White	6-12"	Dry-mesic	May-June	Small, attractive, delicate flowers, grows in small colonies.
Sisyrinchium campestre Blue-eyed Grass	3	No	Yes	Р	Blue	6-12"	Dry-mesic	May-June	Small, attractive, delicate flowers, grows in . small colonies.
Smilacina stellata Starry False Solomon's Seal	1	No	Yes	Р	White	1-2'	Mesic-wet	July-Aug.	Purplish berries very attractive, grows very dense to form a ground cover.
Solidago graminifolia Grass-leaved Goldenrod	1	Yes	No	S/P	Yellow	1-3'	Mesic	AugSept.	Attractive flowers, but aggressive.
Solidago missouriensis Missouri Goldenrod	1	No	Yes	S/P	Yellow	1-3'	Dry-mesic	AugOct.	Attractive flowers, but aggressive.
Solidago nemoralis Gray Goldenrod	1	Yes	No	S/P	Yellow	1-3'	Dry-mesic	AugOct.	Attractive, arching flower heads.
Solidago ptarmicoides syn [Aster ptarmicoides] White Upland Aster	3	No	No	S/P	White	1-2'	Dry	AugSept.	Rare in some areas.
Solidago riddellii Riddell's Goldenrod	1	No	Yes	S/P	Yellow	1-3'	Wet-mesic	SeptOct.	Attractive flowers, but aggressive, needs competition. Turns red in fall.
Solidago rigida Rigid Goldenrod	1	Yes	No	S/P	Yellow	2-4'	Dry-mesic	SeptOct.	Attractive flowers, but aggressive.
Solidago speciosa Showy Goldenrod	1	Yes	No	S/P	Yellow	2-3'	Dry-mesic	AugOct.	Most attractive of all the goldenrods, aggressive, turns red in fall.
Sorghastrum nutans Indian grass (on cover)	1	Yes	No	S/P	_	2-6'	Mesic-dry	AugSept.	Aggressive, needs competition, attractive bronze seedheads in fall.
Spartina pectinata Prairie Cord Grass	1	Yes	No	Р	_	3-6'	Wet-mesic	July-Aug.	Usually found growing in large colonies in moist to wet areas.
Spiranthes cernua Nodding Lady Tresses	3	No	Yes	NA	White	1-2'	Wet-dry	AugSept.	
Spirea alba Meadow Sweet	2	No	No	Р	White	3-6'	Wet-mesic	July-Aug.	A woody shrub with large, fragrant flowers, leaves turning orange in fall.
Spirea tomentosa Steeple Bush	2	No	No	Р	Pink	3-6'	Wet-mesic	July-Aug.	A woody shrub with large, fragrant flowers, leaves turning red in fall.
Sporobolus asper Rough Dropseed	1	Yes	No	S/P	-	2-4'	Mesic-dry	AugSept.	Attractive seedheads, can become aggressive under moist conditions.
Sporobolus heterolepis Prairie Dropseed	2	Yes	No	S/P	_	2-3'	Mesic-dry	AugSept.	Attractive, delicate seedheads.
Stipa spartea Porcupine Grass	2	No	Yes	S/P	_	2-3'	Dry-mesic	May-June	A short prairie bunch grass, seedheads are long, needle sharp.
Tephrosia virginiana Goats rue	3	No	No	S/P	Pink	1-2'	Dry-mesic	June-July	Grows in clumps, very attractive flowers.
Thalictrum dasycarpum Tall Meadow Rue	2	No	Yes	S/P	Purple	3-4'	Wet-mesic	June-July	Tall, attractive foliage.
Thaspium trifoliatum Meadow Parsnip	1	No	No	S/P	Yellow	2-3'	Mesic	May-June	Resembles Golden Alexander.
Tradescantia bracteata Prairie Spiderwort	1	Yes	No	S/P	Blue	1-2'	Mesic-wet	June-Aug.	Low growing, flowers for a long time.
Tradescantia ohiensis Ohio Spiderwort	2	Yes	No	S/P	Blue	1-2'	Dry-mesic	June-Aug.	Low growing, flowers for a long time.
Verbena hastata Blue Vervain	1	Yes	No	S/P	Blue	3-4'	Wet-mesic	AugSept.	Numerous flowers, leaves turn reddish-purple.
Verbena stricta Hoary Vervain	1	Yes	No	S/P	Blue	2-3'	Mesic-dry	June-Sept.	Attractive spike flowers, can become weedy under moist conditions.
Vernonia fasciculata Ironweed	1	No	No	S/P	Red-purple	2-5'	Wet-mesic	July-Aug.	Aggressive, tall and coarse.
Veronicastrum virginicum Culver's Root	3	No	No	S/P	White	3-6'	Mesic-wet	July-Aug.	Attractive spike flowers.
Vicia americana American Vetch	1	No	No	S/P	Blue	2-3'	Dry-mesic	May-Aug.	Blooms a long time.
Viola nephrophylla Blue Marsh Violet	3	No	No	Р	Blue	3-8"	Wet-mesic	May-June	Low growing, numerous flowers.
Viola pedata Bird's Foot Violet	3	No	No	Р	Blue	3-8"	Dry-mesic	May-June	Low growing, numerous flowers.
Viola pedatifida Prairie Violet	3	No	No	Р	Blue	3-8"	Dry-mesic	May-June	Low growing, numerous flowers.
Viola sagittata Arrow-leaved Violet	3	No	No	Р	Purple	3-8"	Dry-mesic	May-June	Low growing, numerous flowers.
Zizia aptera Heart leaved Golden Alexander	1	No	No	S/P	Yellow	1-3'	Wet-mesic	May-June	Large, showy flowers.
Zizia aurea Golden Alexander	1	No	No	S/P	Yellow	1-3'	Wet-mesic	May-June	Large, showy flowers.
Golden Alexander									

OTHER PRAIRIE PLANT COMMUNITIES

Several other prairie plant communities are found in the Midwest, constituting a small fraction of the total vegetation that exists today. They contain the same herbaceous plant species found in the wet, mesic, and dry prairie communities, but in different proportions.

OAK SAVANNA

Oak savannas were a common ecotype between the eastern deciduous forest and the tallgrass prairie. These were park-like groves of oak, often bur oak, *Quercus macrocarpa*, and mesic prairie grasslands. Today most savannas have been destroyed, although some groves of trees still exist in pastures or in suburban housing developments. Fire was a significant factor in influencing the position and extent of this community. Some public land surveys of Minnesota indicate that rather than a park-like grove, this community may have been more brushland with small groves of trees intermixed with open prairie.

FENS

Fen is a geologic term used to describe low, swampy, boggy areas, but the word also describes the soil/plant relationship. Fens are wet prairie communities found on hillsides, fed by internal springs, associated with either extinct or existing glacial lakes of a dolomitic limestone source. Water and soil conditions tend to vary slightly from site to site, but they generally tend to be high in magnesium sulfates, magnesium and calcium bicarbonates. Sedges and grasses are the dominant plants found in fens.

ASPEN PARKLAND

The aspen parkland plant communities are found in the far north of the Midwest, a transition area between the coniferous forest to the northeast and the prairie communities of the west. Ancient beach ridges hold large concentrations of peat, gravel, and sand. These poorly drained areas shelter and wet and mesic prairie communities, supporting populations of aspen and other fast-growing trees between prairie fires. The aspen parkland once covered vast acreages within the poorly drained flatlands left by Glacial Lake Agassiz. Remnants existing today are a mosaic of wet prairie, sedge meadow, shrub thicket, and aspen groves.

REFERENCES

Audubon Society. 1979. Field Guide to North American Wildflowers/Eastern Region. Alfred A. Knopf. New York.

Barr, Claude. 1983. Jewels of the Plains: Wildflowers of the Great Plains, Grasslands and Hills. University of Minnnesota Press. Minneapolis, MN.

Brown, L. 1985. Grasslands. Audubon Society Nature Guide. Alfred A. Knopf. New York, NY.

Courtney, Booth, and James H. Zimmerman. 1992. Wildflowers and Weeds. Simon and Schuster. New York, NY.

Congdon, Eleanor. 1993. Bibliography—Native Grasses and Wildflower Research Publications. Legislative Commission of Minnesota's Natural Resources. St. Paul. MN.

Curtis, John T. 1959. The Vegetation of Wisconsin. University of Wisconsin. Madison, WI.

Great Plains Flora Association. 1977. Atlas of the Flora of the Great Plains. Iowa State Press. Ames, IA.

Great Plains Flora Association. 1986. Flora of the Flora of the Great Plains. University of Kansas Press. Lawrence, KS.

Hitchcock, A.S. 1971. Manual of Grasses of the United States. Dover Publishing. New York, NY.

Minnesota Department of Natural Resources. 1988. Natural Vegetation of Minnesota at the time of public land survey 1847-1907. MN DNR Biological Report No. 1. St. Paul, MN.

Minnesota Department of Natural Resources. 1993. Minnesota's Native Vegetation, A Key to Natural Communities. MN DNR Biological Report No. 20. St. Paul, MN.

Morely, Thomas. 1974. Spring Flora of Minnesota. Botany Department, University of Minnesota Press. St. Paul, MN.

Moyle, J.B., and E.W. Moyle. 1977. Northland Wildflowers—A Guide for the Minnesota Region. University of Minnesota Press. Minneapolis, MN.

Ownbey, Gerald, and Thomas Morley. 1991. Vascular Plants of Minnesota: A Checklist and Atlas. University of Minnesota Press. Minneapolis, MN.

Peterson, Roger T., and Margaret McKenny. 1968. A Field Guide to Wildflowers, Northeastern/North Central North America. Houghton Mifflin Co. Boston, MA.

Risser, P.G., E.C. Birney, and H.D. Blocker. 1981. The True Prairie Ecosystem. Hutchinson Ross Publishing. Stroudsburg, PA.

Runkel, Sylvan T., and Dean M. Roosa. 1989. Wildflowers of the Tallgrass Prairie. Iowa State University Press. Ames, IA.

Smith, Welby R. 1993. Orchids of Minnesota. University of Minnesota Press. Minneapolis, MN.

Stubbendieck, J., S. Hatch, and K. Hirsch. 1986. North American Range Plants. University of Nebraska Press. Lincoln, NE.

Vance, F.R., J.R. Jowsey, and J.S. McLean. 1984. Wildflowers of the Northern Great Plains. University of Minnesota Press. Minneapolis, MN.

Van der Valk, A. 1989. Northern Prairie Wetlands. Iowa State University Press. Ames, IA.

Weaver, J.E. 1954. North American Prairie. Johnson Publishing. Lincoln, NE.

Wendt, Keith M. 1984. A Guide to Minnesota Prairies, The Natural Heritage Program. Minnesota Department of Natural Resources. St. Paul, MN.

LANDSCAPING & PROPAGATION

Art, Henry W. 1991. The Wildflower Gardener's Guide: Midwest, Great Plains, and Canadian Prairies edition. Story Communications, Inc., Pownal, VT.

Diekellmann, John, and R. Schuster. 1982. Natural Landscaping: Designing with Native Plant Communities. McGraw Hill, New York.

Henderson, Carol. 1987. Landscaping for Wildlife. Nongame Wildlife Program, Minnesota Department of Natural Resources, St. Paul, MN.

National Wildflower Research Center. 1989. The Wildflower Handbook. Texas Monthly Press, Austin, TX.

Stevenson, V. 1985. The Wild Garden: Making Natural Gardens Using Wild and Native Plants. Penguin, New York.

Sullivan, G. and R. Daley. 1981. Directory to Resources on Wildflower Propagation. Missouri Botanical Garden, St. Louis, MO.

Wilson, Tim. 1992. Landscaping with Wildflowers: An Environmental Approach to Gardening. Houghton Mifflin Co., Boston, MA.

Wilson, Jim. 1992. Landscaping with Wildflowers. Houghton Mifflin Co., New York.

Wilson, William. 1984. Landscaping with Wildflowers and Native Plants. Ortho Books, San Francisco, CA.

Young, J., and C. Young. 1986. Collection, Processing and Germinating Seeds of Wildland Plants. Timber Press, Portland, OR.

Prairie establishment & management

Manitoba Natural Resources. 1990. Prairie Grasslands Guidebook, a management manual. Public Information Unit, Manitoba Natural Resources, Winnipeg, Manitoba.

Nichols, Stan, and L. Entine. 1976. Prairie Primer. University of Wisconsin-Extension, Madison, WI.

Pauly, Wayne R. 1988. How to Manage Small Prairie Fires. Dane County Park Commission, Madison, WI.

Rock, H. 1971. Prairie Propagation Handbook. Boerner Botanical Gardens, Hales Corners, WI.

Smith, J. Robert, and Beatrice Smith. 1980. The Prairie Garden: 70 Native Plants You Can Grow in Town or Country. The University of Wisconsin Press, Madison, WI.

Shirley, Shirley. 1994. Restoring the Tallgrass Prairie, an illustrated manual for Iowa and the Upper Midwest. University of Iowa Press, Iowa City, IA.

Native plant and horiticultural societies

IOWA

Iowa Natural Areas Inventory
Bureau of Preserves and Ecological Services
Department of Natural Resources
Wallace State Office Building
Des Moines, IA 50319
(515) 281-8524
State Natural Heritage Program Office.

The Nature Conservancy lowa Field Office 431 E. Locust, Suite 200 Des Moines, IA 50309 (515) 244-5044

MICHIGAN

Michigan Botanical Club
Matthaie Botanical Gardens
1800 Dixboro Road
Ann Arbor, MI 48105
Publishes The State Newsletter and Michigan
Botanist. Has 5 regional chapters, programs
on natural history and native plants.

Michigan Natural Features Inventory Mason Building, 5th Floor Box 30028 Lansing, MI 48909 (517) 373-1552 State Natural Heritage Program Office.

The Nature Conservancy Michigan Field Office 2840 East Grand River, Suite 5 East Lansing, MI 48823 (517) 332-1741

MINNESOTA

Minnesota Natural Heritage Program
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155
(612) 296-4284
State Natural Heritage Program Office.

Minnesota State Horticultural Society 1755 Prior Ave. N. Falcon Heights, MN 55113-5549 (612) 643-3601 Publishes Minnesota Horticulturist magazine. Seminars, library, and educational programs.

Minnesota Native Plant Society
220 Biological Science Center
University of Minnesota
1445 Gortner Avenue
St. Paul, MN 55108
Publishes The Minnesota Plant Press. Annual conference on native plants, field trips, regional fairs and exhibits.

The Nature Conservancy Minnesota Field Office 1313 5th Street Minneapolis, MN 55414 (612) 331-0750

NEBRASKA

The Nature Conservancy Nebraska Field Office 418 South 10th Street Omaha, NE 68102 (402) 342-0282

Nebraska Natural Heritage Program Games and Parks Commission 2200 N. 33rd Street P.O. Box 30370 Lincoln, NE 68503 (402) 471-5421 State Natural Heritage Program Office.

NORTH DAKOTA

The Nature Conservancy Dakotas Field Office 1014 East Central Avenue Bismarck, ND 58501 (701) 222-8464

SOUTH DAKOTA

South Dakota Natural Heritage South Dakota Department of Game, Fish, and Parks Wildlife Division 445 E. Capitol Avenue Pierre, SD 57501-3185 (605) 773-4277 State Natural Heitage Program Office.

WISCONSIN

The Nature Conservancy Wisconsin Field Office 333 West Mifflin, Suite 107 Madison, WI 53703 (608) 251-8140

Wisconsin Natural Heritage Program Endangered Resources/4 Department of Natural Resources 101 S. Webster Street, Box 7921 Madison, WI 53707 (608) 266-0924 State Natural Heritage Program Office.

About the authors

Roy Robison received his B.S. from the University of Minnesota and is president of Landscape Alternatives, Inc., a nursery that propagates and sells native wildflowers and grasses.

Donald B. White is a professor in the Department of Horticultural Science, University of Minnesota. He teaches courses in turfgrass science and is interested in native prairie establishment.

Mary H. Meyer is an assistant professor in the Department of Horticultural Science, University of Minnesota, and conducts research on native and ornamental grasses.



North Central Regional Extension Publications are subject to peer review and prepared as a part of the Cooperative Extension activities of the thirteen land-grant universities of the 12 North Central States, in cooperation with the Extension Service—U.S. Department of Agriculture, Washington, D.C. The following states cooperated in making this publication available.

INDIANA
Purdue University
1143 Ag Admin Bldg
West Lafayette IN 47907-1143
Internet: southard@ecn.purdue.edu

IOWA Iowa State University Ames IA 50011 Internet: x1hamilt@exnet.iastate.edu

MINNESOTA* University of Minnesota 20 Coffey Hall 1420 Eckles Ave. St. Paul MN 55108-6069 Internet: jean@dc.mes.umn.edu



MISSOURI Lincoln University 900 Moreau Drive Jefferson City MO 65101 Internet: dfasmedia@lua6.lu.edu

University of Missouri 1-98 Agriculture Bldg Columbia MO 65211 Internet: extret@umcvmb.missouri.edu

NEBRASKA University of Nebraska 105 Ag Communications Bldg Lincoln NE 68583-0918 Internet: agcm002@unlvm.unl.edu

OHIO
Ohio State University
216 Kottman Hall
Columbus OH 43210
Internet: scardena@agvax2.ag.ohio-state.edu

*Publishing state

For copies of this and other North Central Regional Extension Publications, write to: Publications Office, Cooperative Extension Service, in care of the University listed above for your state. If they do not have copies or your state is not listed above, contact the publishing state as specified.

Produced by the Educational Development System, Minnesota Extension Service. Photographs by Don Breneman Graphic Design by Tammy Nelson



Printed on recycled paper with minimum 10% postconsumer waste, using agribased inks.

In accordance with the Americans with Disabilities Act, this material is available in alternative formats upon request. Please contact your Minnesota county extension office or, outside of Minnesota, contact the Distribution Center at (612) 625-8173.

Copyright © 1995 Minnesota Extension Service, University of Minnesota. All rights reserved.

The University, including the Minnesota Extension Service, is an equal opportunity educator and employer.