

SUPPLEMENTARY APPENDIX 1: List of Plants Native to Nebraska for Pollinators

A highly diverse planting will provide numerous nectar, pollen, foraging, and shelter sources for pollinators during multiple seasons. While not inclusive of every plant that pollinators may use, this list of flowering herbaceous perennials and annuals, shrubs, trees, grasses, ferns, sedges, rushes, and bulrushes offers some useful suggestions for native plants that will attract pollinators to gardens and restorations in Nebraska. Choose plants appropriate to ecosystems. Common and scientific names are listed as given in the U. S. Department of Agriculture’s PLANTS database (USDA 2016). Additional information about growth habits was derived from the Natural Resources Conservation Service (2017a,b), Lady Bird Johnson Wildflower Center (2016), Wisconsin State Herbarium (2016), Hilty (2015), Müller (2009), and experts as given in the acknowledgments section. Plants are listed in alphabetical order by Family and scientific name under growth habit (i.e., herbs/forbs, graminoids, shrubs, trees). Although all of the plants in this table are native to Nebraska, a very limited number of species may be listed as invasive by county; it is advisable to compare your plans for pollinator plots with your county noxious weed list to avoid violations. Also, some plants have mechanical and/or chemical defenses against herbivory that can cause reactions in people or animals. Make your selections accordingly if you think you, young children, pets, or livestock will be highly susceptible to plant defenses or if you have other concerns.

Herbs/forbs:

Arum Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Jack in the pulpit	<i>Arisaema triphyllum</i>	S-P	A-W	sand, loam, clay	1-2	Mar-Jun	Pulpit-like flower provides red berries in late summer; woodland plant
bearded beggarticks	<i>Bidens aristosa</i>	P-F	A-W	various soils except very sandy	1-4	Jul-Sept	Flowers yellow; 2-pronged bur

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
bearded beggarticks	<i>Bidens aristosa</i>	P-F	A-W	various soils except very sandy	1-4	Jul-Sept	Flowers yellow; 2-pronged bur
white doll's daisy	<i>Boltonia asteroides</i>	F	A	clay-tolerant	3-5	late Jul-Oct	Flowers are white rays with yellow center; rays sometimes tinged pink to purple; tolerates standing water for short periods of time
false boneset	<i>Brickellia eupatorioides</i>	F	D	tolerates poor soil; limestone, clay, sand, gravel	1-3	Sept-Nov	White, yellow, or red flowerheads
tall thistle	<i>Cirsium altissimum</i>	F-P	A-W	fertile loam, clay-loam, sandy-loam	4-5	late Jul-Oct	Flower light to dark purple, occasionally white florets

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
prairie thistle	<i>Cirsium canescens</i>	F	A-D	sand, gravel, disturbed sites	1-3	May-Aug	Flower cream, occasionally pale lavender
Flodman's thistle	<i>Cirsium flodmanii</i>	F	A-D	disturbed sites	1-3	late Jun-Sept	Flowers dark purple, sometimes pink, rarely white
yellowspine thistle	<i>Cirsium ochrocentrum</i>	F	D	sand, gravel, disturbed sites	1-4	Jul-Aug	Flowers purple to rose-colored, rarely white
wavyleaf thistle	<i>Cirsium undulatum</i>	F	A-D	sand, loam, clay; disturbed sites	1-3	Jun-Jul	Flowers purple to pinkish-purple or white
blue mistflower	<i>Conoclinium coelestinum</i>	F-P	M	moist loam, sand, or clay; disturbed sites	1-3	Jul-Nov	Flowers blue to purple; may become weedy

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
stiff tickseed	<i>Coreopsis palmata</i>	F	D-A	loam, clay-loam, sandy loam, or some gravel	1-3	May-Sept	Medium-large yellow flower heads
parasol whitetop	<i>Doellingeria umbellata</i>	F-P	W-A	calcareous, sandy-loam, slightly acidic	2-4	Aug-early Oct	Flower heads with white rays and yellow center, clustered inflorescence flat-topped
blacksamson echinacea	<i>Echinacea angustifolia</i>	F	A-D	clay loam, med. loam, sandy loam, clay, sandy	1-2	Jun-Jul	Flower is a pinkish ray that droops from a dark cone-shaped center
pale purple coneflower	<i>Echinacea pallida</i>	F-P	A-D	sand, loam	3-5	Jun-Jul	Narrow drooping flower petals; pale purple

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
tall thoroughwort	<i>Eupatorium altissimum</i>	F-P	D-A	loam, clay, or gravel; high pH tolerated; disturbed sites	2-5	late Jul-Sept	Flowers in branching clusters, white, star-shaped with 5 triangular petal-like lobes
common boneset	<i>Eupatorium perfoliatum</i>	F-S	W-A	sand, loam, clay	3-6	Jun-Oct	Flowers pure white
lateflowering thoroughwort	<i>Eupatorium serotinum</i>	P	A	sandy, sandy loam, med. loam, clay loam, clay; disturbed sites	2-5	late Aug-early Oct	Small white flowers form larger heads
spotted joe pye weed	<i>Eutrochium maculatum</i>	F-P	W-A	mineral rich, silty or sandy loam	3-6	Aug-Sept	large, purple, dome-shaped inflorescences; tolerates water-logged conditions, sandy wetlands

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
sweetscented joe pye weed	<i>Eutrochium purpureum</i>	F-S	A	sand, loam, clay	2-6	Jun-Sept	Pale pinkish-lavender florets
Indian blanket	<i>Gaillardia pulchella</i>	F-P	A	sandy or calcareous; often disturbed sites	1-2	May-Aug	Flowers magenta to red with yellow border and reddish center
Spanish gold	<i>Grindelia papposa</i>	F	A-D	disturbed sites	2-5	Aug-Sept	Yellow flower head
curlycup gumweed	<i>Grindelia squarrosa</i>	F	D	disturbed sites	1-3	Jul-Oct	Flowers yellow; plant that is researched for its use as biofuel

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
sneezeweed	<i>Helienium amarum</i>	P	D	acid-based, calcareous, limestone-based, sand, sandy loam, med. loam, clay loam, clay; disturbed sites	1–3	Apr–Sept	Flowers yellow, occasionally with purple center, aromatic
common sneezeweed	<i>Helienium autumnale</i>	F–P	A–W	moist clay	2–5	late Jul–early Oct	Flowers yellow; despite its name, causes very few allergies because not wind-pollinated
common sunflower	<i>Helianthus annuus</i>	F–P	D–A	sand, loam, clay	1–9	Jul–Oct	Large, showy flower heads

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
sawtooth sunflower	<i>Helianthus grosseserratus</i>	F	A	Prefers fertile loamy soil but tolerant of other soil types	3–12	Aug–Nov	Large yellow flowers with saw-toothed petals
cheerful sunflower	<i>Helianthus ×laetiflorus</i>	F	D	sand, loam, clay	3–6	Aug–early Oct	Flowers yellow; naturally occurring hybrid
Maximilian sunflower	<i>Helianthus maximiliani</i>	F	D–A	various soils; clay-like but tolerant of limestone-based, sandy, sandy loam, med. loam, clay loam, clay	3–10	Aug–Nov	Numerous yellow flowers; enjoyed by livestock

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
stiff sunflower	<i>Helianthus pauciflorus</i>	F	A-D	loam, clay loam, sand, or gravel	2-6	late Jul- Sept	Flower yellow; leaves mostly opposite, nearly stalkless, gray- green, mostly on lower half of plant
Jerusalem artichoke	<i>Helianthus tuberosus</i>	F	D-A	well- drained, sand, loam, clay	3-6	late Jul- Oct	Flower heads are large, golden yellow
smooth oxeye	<i>Heliopsis helianthoides</i>	F	A	sandy	3-5	late Jun- Oct	Flowers yellow with golden center
tall blazing star	<i>Liatrix aspera</i>	F-P	A-D	sand, loam	1-4	Jul-Sept	Flowers in spike-like cluster of purple to pink; long style emerges from center of flower

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
dotted blazing star	<i>Liatris punctata</i>	F	A-D	well-drained, sandy, calcareous	1-2	Aug-Oct	Flowers pink to purple
prairie blazing star	<i>Liatris pycnostachya</i>	F	A-W	rich loam or clay loam, rocky	2-5	Aug-early Oct	Flowers pink to purple, cylindrical
stiff goldenrod	<i>Oligoneuron rigidum</i>	F	D-W	various; tolerates nutrient poor, acidic, or neutral soil	1-5	Aug-Oct	Dark yellow, bell-shaped flower-heads in terminal cluster

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
upright prairie coneflower	<i>Ratibida columnifera</i>	F	A	various well-drained, often calcareous; limestone-based, caliche type, clay, clay loam, med. loam, sandy loam, sandy	1–3	May–Oct	Red or yellow petals droop from red-brown central disk
pinnate prairie coneflower	<i>Ratibida pinnata</i>	F–P	A	various; sandy to clay and calcareous	3–5	late May–Sept	Yellow flower petals droop from center grayish-brown cone
blackeyed Susan	<i>Rudbeckia hirta</i>	F–P	A–D	clay, loam, peat, sand	1–3	late Jun–Sept	Flowers bright yellow with dark center; typically easy to grow

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
lambstongue ragwort	<i>Senecio integerrimus</i>	P-F	W-A	fine to coarse-textured	1-2	late Mar-late May	Flowers yellow; grows well in riparian areas; drought-intolerant
Riddell's ragwort	<i>Senecio riddellii</i>	F-P	D	sand	1-3	late Jun-late Sept; or spring	Flowers yellow; sub-shrub
broom-like ragwort	<i>Senecio spartioides</i>	F	D	rocky, disturbed sites	<3	Jun-late Sept	Flowers pale yellow; drought-tolerant but also tolerates poor drainage; sub-shrub
wholeleaf rosinweed	<i>Silphium integrifolium</i>	F	A	well-drained; sand, loam, clay	2-6	Jul-Sept	Flowers bright yellow

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
compassplant	<i>Silphium laciniatum</i>	F	D-A	various; well-drained; sand, loam, clay	3-12	Jul-early Sept	Name refers to the deeply incised leaves, which tend to orient in a north-south direction
cup plant	<i>Silphium perfoliatum</i>	F-P	D-W	sand, loam, tolerates clay	3-6	Jul-Sept	clasping leaves around stem form a rain-catching cup that provides a water source for wildlife
Canada goldenrod	<i>Solidago canadensis</i>	F-P	A	caliche type, sandy, sandy loam, med. loam, clay loam, clay	3-6	late Aug-early Nov	Showy yellow flowers

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
gray goldenrod	<i>Solidago nemoralis</i>	F-S	A	sandy, sandy loam, med. loam, clay loam, clay, caliche, rocky	1-2	Aug-Sept	Arching spikes of small yellow flowers
downy ragged goldenrod	<i>Solidago petiolaris</i>	F-P	A-D	sandy to rocky, slightly acidic soil	3-4	Aug-early Nov	Flowers golden yellow rays; flower heads have a floral bract
showy goldenrod	<i>Solidago speciosa</i>	F-P	A-D	sand, loam, clayey, rocky	1-5	Aug-Sept	Small yellow flowers form showy spikes up to 1' long
common blue wood aster	<i>Symphotrichum cordifolium</i>	F	W	sand, loam, clay	2-4	Jul-Oct	Ray flowers light blue to purple, sometimes white, yellow center

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
white heath aster	<i>Symphyotrichum ericoides</i>	F	A-D	disturbed sites	2-3	late Aug-early Oct	Flower heads white rays with yellow center
smooth blue aster	<i>Symphyotrichum laeve</i>	F	D-A	loam, clay-loam, sandy loam, some rock	2-4	mid Sept-Oct	Showy ray flowers, violet to purple with yellow centers
skyblue aster	<i>Symphyotrichum oolentangiense</i>	F-S	A	well-drained, dry, sandy or rocky sites	1-3	late Aug-early Nov	Flowers deep-blue to lavender around center yellow disk
New England aster	<i>Symphyotrichum novae-angliae</i>	F-P	A	sand, loam, clay	2-6	Aug-Oct	Pink, purple, or blue flowers in a ray with yellow-orange centers; clustered stems
hairy white oldfield aster	<i>Symphyotrichum pilosum</i>	F	A	sandy	1-3	Aug-early Nov	White showy ray flowers surround yellow center

APPENDIX S-1. (cont.)

Herbs/forbs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
willowleaf aster	<i>Symphotrichum praealtum</i>	F-S	A	loamy	3-5	late Aug-Oct	Flowers light blue with yellow center
golden crownbeard	<i>Verbesina encelioides</i>	F	D	sandy, gravelly areas, disturbed sites	2-3	Apr-Oct	Flower heads yellow with 3-toothed rays
Baldwin's ironweed	<i>Vernonia baldwinii</i>	F	A	rocky, sandy, clay, clay loam, med. loam, sandy loam, sandy, limestone-based, caliche type	3-5	Jul-Nov	Flowers pink to purple; spreads by rhizomes

APPENDIX S-1. (cont.)

Herbs/forbs:**Aster Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
prairie ironweed	<i>Vernonia fasciculata</i>	F-P	A-W	fertile; loam, peat, sand	3-6	Jul-Sept	Densely clustered, rose-purple flowers on sturdy stems

APPENDIX S-1. (cont.)

Herbs/forbs:

Bellflower Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
cardinalflower	<i>Lobelia cardinalis</i>	F-S	A-W	humus-rich; med. loam, clay loam, limestone-based, sandy, sandy loam, clay	1-6	May-Oct	Showy flowers red in terminal spikes; good choice for riparian areas
great blue lobelia	<i>Lobelia siphilitica</i>	F-S	W-A	sand, loam, clay	2-3	late Jul-early Oct	Tubular flowers, lavender-blue; upper lip of flower has two segments and lower lip has three

APPENDIX S-1. (cont.)

Herbs/forbs:

Borage Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
hoary puccoon	<i>Lithospermum canescens</i>	F-S	D-A	well-drained soils; disturbed sites	2	Mar-Jun	Tubular flowers yellow-orange to orange
soft-hair marbleseed	<i>Onosmodium bejariense</i>	S	D	sandy or rocky, well-drained	1-3	late May-Aug	Tubular, white, cream, or yellowish-green

APPENDIX S-1. (cont.)

Herbs/forbs:

Buckwheat Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
water knotweed	<i>Polygonum amphibium</i>	F	W	hydric, muddy	1–2	Jun–Sept	Flowers bright pink in spike; can grow in water or on land
swamp smartweed	<i>Polygonum hydropiperoides</i>	F–P	W–A	hydric, muddy	<3	Jun–late Oct	Flowers white; in shallow water or on moist soils
Pennsylvania smartweed	<i>Polygonum pennsylvanicum</i>	F–P	A	dark, moist, loamy	1–4	Mar–Oct	Flowers pinkish-red in dense cluster

APPENDIX S-1. (cont.)

Herbs/forbs:

Buttercup Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
yellow marsh marigold	<i>Caltha palustris</i>	P-S	A-W	muddy, humus-rich	1-2	Apr-May	Flowers shiny yellow; good choice for riparian areas
Carolina larkspur	<i>Delphinium carolinianum virescens</i>	F-P	A-D	sandy, sand loam, med. loam, clay loam, clay; acid-based, calcareous	1-2	Apr-Jul	Flowers with spur, white to blue-violet in spike-like cluster
dwarf larkspur	<i>Delphinium tricorne</i>	P	A	rich, moist soil	1-3	Apr-May	Flowers spurred, blue or white
purple meadow-rue	<i>Thalictrum dasycarpum</i>	P	A	rich, sandy or calcareous loams; sandy, sandy loam, med. loam, clay loam, acid-based, calcareous	3-7	Apr-Jul	White, yellow, green, or purple flowers occur in loose delicate, terminal clusters

APPENDIX S-1. (cont.)

Herbs/forbs:**Calamus Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
sweetflag	<i>Acorus americanus</i>	F-P	A-W	mucky, silty	2-3	May-Jul	Grows best in water depth <1'; good for soil stabilization and preventing bank erosion; cinnamon-like aroma

APPENDIX S-1. (cont.)

Herbs/forbs:

Caper Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
yellow spiderflower	<i>Cleome lutea</i>	F	A-D	sandy, rocky	1-3	May-Aug	Showy, 4-petaled yellow flowers
Rocky Mountain beeplant	<i>Cleome serrulata</i>	F-P	D	well-drained, sandy	4-5	Jul-Sept	Flowers pink to reddish-purple, rarely white
narrowleaf rhombopod	<i>Cleomella angustifolia</i>	F	A	heavy alkaline clay or sand	2-7	Jun-Sept	Flowers yellow orange and fragrant

APPENDIX S-1. (cont.)

Herbs/forbs:

Carrot Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
button eryngo	<i>Eryngium yuccifolium</i>	F	A-D	sandy, loamy	4-6	Jun-Aug	Flowers turn purplish in the fall; yucca-like foliage
hemlock waterparsnip	<i>Sium suave</i>	F-P	A-W	sandy or mucky	2-6	Jul-Sept	Clusters of tiny white flowers, fragrant; semi-aquatic plant
golden zizia	<i>Zizia aurea</i>	P-S	A-W	sandy, sandy-clay, loam	1-2	May-Jul	Leaves are food source for swallowtail larvae

APPENDIX S-1. (cont.)

Herbs/forbs:**Cat-tail Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
broadleaf cattail	<i>Typha latifolia</i>	F-P	W	hydric, rich, mud, saline	4-8	Apr-Jun	Spike of small male flowers above cylindrical brown female flowers

APPENDIX S-1. (cont.)

Herbs/forbs:**Dogbane Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
spreading dogbane	<i>Apocynum androsaemifolium</i>	F-S	D	sand, gravel	2-5	Jun-Aug	Relative of milkweed; small groups of tiny pink, bell-shaped flowers near branch tips; flowers striped with darker pink inside bell; lilac-like scent; important nectar source for adult monarchs
Indianhemp	<i>Apocynum cannabinum</i>	P-F	A	various	3-5	May-Aug	Relative of milkweed; small tubular flowers white; fibers can be used to make rope

APPENDIX S-1. (cont.)

Herbs/forbs:

Evening Primrose Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
broadleaf enchanter's nightshade	<i>Circaea lutetiana</i>	P-S	A-W	sand, loam, clay	1-2	late May-Aug	Flowers white, sometimes faded pink; two stamens project from center of flower
common evening primrose	<i>Oenothera biennis</i>	F	A-D	well-drained; disturbed sites	2-6	Jul-Oct	Lemon-scented yellow flowers open at dusk and close mid-day; blooms may open on shady days as well
fourpoint evening primrose	<i>Oenothera rhombipetala</i>	F	A-D	sandy	1-4	Jul-Sept	Lemon-scented yellow flowers open at dusk and close mid-day; may bloom on shady days as well

APPENDIX S-1. (cont.)

Herbs/forbs:

Figwort Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Canadian lousewort	<i>Pedicularis canadensis</i>	P-S	A	limey	1-3	late Apr-Jun	Tubular, 2-lipped flowers yellow and red; gets some nourishment from other plant roots
meadow lousewort	<i>Pedicularis crenulata</i>	P-F	A-W	requires continually moist soil	1	May-Jul	Flowers usually purple; often grows near streams
swamp lousewort	<i>Pedicularis lanceolata</i>	P-F	W	limey	1-3	Aug-Oct	Long creamy white to light yellow flowers

APPENDIX S-1. (cont.)

Herbs/forbs:

Figwort Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
foxglove beardtongue	<i>Penstemon digitalis</i>	F-P	A-D	fertile, well-drained loams, clay loams, and sand; prefers acidic but tolerates lime	2-5	May-Jul	Stalked clusters of white, tubular, unevenly five-lobed flowers which rise in pairs from upper leaf axils; purple lines inside flowers attract bees
large beardtongue	<i>Penstemon grandiflorus</i>	F	D	sandy, rocky	2-3	May-Jun	Tubular flowers pink to purple
Culver's root	<i>Veronicastrum virginicum</i>	F-P	A-W	moist, rich	3-6	Jul-Sept	Small white to cream-colored elongate inflorescences

APPENDIX S-1. (cont.)

Herbs/forbs:**Fumitory Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
dutchman's breeches	<i>Dicentra cucullaria</i>	F-S	A-W	humus-rich, acidic to neutral; tolerates limestone	1	Mar-May	Distinctive flowers white, double-spurred; leaves fern-like

APPENDIX S-1. (cont.)

Herbs/forbs:

Geranium Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Carolina geranium	<i>Geranium carolinianum</i>	F-P	A-D	gravel, clay	usually <1, up to 2'	Apr-Aug	Flowers white to pink
spotted geranium	<i>Geranium maculatum</i>	F-S	A	rich, acidic, but may tolerate poorer soil	1-3	Mar-Jul	Flowers range in color from white to lavender-purple

APPENDIX S-1. (cont.)

Herbs/forbs:**Iris Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
prairie blue-eyed grass	<i>Sisyrinchium campestre</i>	F-P	D-A	sandy	1-2	May-Jun	Dainty member of the iris family with white to blue flowers; named for its slender grass-like leaves

APPENDIX S-1. (cont.)

Herbs/forbs:

Lily Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
meadow garlic	<i>Allium canadense</i>	F	A	moderately rich, neutral soils	1–2	late Apr–early Jul	Flowers star-shaped, pink or whitish; emits onion-like scent; edible bulb
Michigan lily	<i>Lilium michiganense</i>	F–P	W–A	loamy, sandy loam	2–5	Jun–early Aug	Dangling orange to red-orange flowers with light spots
smooth Solomon’s seal	<i>Polygonatum biflorum</i>	P–S	A–D	rich, acid soils, but also calcareous; prefers high humus; sandy, sandy loam, med. loam, clay loam, clay	1–5, usually 2’	Mar–Jun	Flowers typically pale green to white

APPENDIX S-1. (cont.)

Herbs/forbs:**Mallow Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
light poppymallow	<i>Callirhoe alcaeoides</i>	F	A	dry, sandy or clayey; calcareous	2	late Apr–Jul	Flowers white, pink, or magenta

APPENDIX S-1. (cont.)

Herbs/forbs:**Mangosteen Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
great St. Johnswort	<i>Hypericum ascyron</i>	F-S	A-W	loam, clay-loam, rocky	2-6	late Jun-Aug	Flowers with 5 yellow petals and very bushy stamens; leaves dark green

APPENDIX S-1. (cont.)

Herbs/forbs:

Milkweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
clasping milkweed	<i>Asclepias amplexicaulis</i>	F	D	sandy	2–3	May–Jul	Flowers variable in color: green, pink, to purple; extremely fragrant; leaves typically clasp stem
sand milkweed	<i>Asclepias arenaria</i>	F	D	sandy	1–3	May–Aug	Greenish-white flowers
spider milkweed	<i>Asclepias asperula</i>	F	D–W	rocky, sandy	1–2	Mar–Oct	Flowers white and green
Engelmann's milkweed	<i>Asclepias engelmanniana</i>	F	A–D	sandy, calcareous	1–4	Jun–Sept	Flowers green, tinged purple

APPENDIX S-1. (cont.)

Herbs/forbs:

Milkweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
swamp milkweed ^c	<i>Asclepias incarnata</i>	F-P	W-A	rich, wet, muddy; mucky clay soils; prefers neutral to slightly acidic soil, tolerates heavy clay	2-4	late Jun-early Sept	Pink to purple-colored flowers; white variants; good choice for riparian areas
sidecluster milkweed	<i>Asclepias lanuginosa</i>	F	D	sandy, gravelly, rocky	1	late May-Aug	Flowers white and green
broadleaf milkweed	<i>Asclepias latifolia</i>	F-P	D-A	sandy, well-drained	2-3	Jul-Oct	Numerous large leaves lack branches; flowers yellowish, pale-green

APPENDIX S-1. (cont.)

Herbs/forbs:

Milkweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
plains milkweed	<i>Asclepias pumila</i>	F-P	D-A	sandy, clayey, or rocky calcareous or gypseous soil	<1	Jul-Aug	Flowers in white or pink umbel
purple milkweed	<i>Asclepias purpurascens</i>	F	D	sandy	2-3	May-Jul	Flowers deep magenta; associated with oak-hickory savanna
showy milkweed ^c	<i>Asclepias speciosa</i>	F	D-W	sand, loam, clay	2-4	May-Sept	Flowers in rose-colored cluster
slimleaf milkweed	<i>Asclepias stenophylla</i>	F	D-A	rocky or sandy limestone	1-3	Jun-early Aug	Flowers showy; pale greenish-white to pale yellowish, sometimes tinged with purple

APPENDIX S-1. (cont.)

Herbs/forbs:

Milkweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
horsetail milkweed	<i>Asclepias subverticillata</i>	F-P	D	sandy	2-4	May-Sept	Star-like flowers greenish-white, sometimes tips are tinted purple
prairie milkweed ^c	<i>Asclepias sullivantii</i>	F	A-W	variable	2-3	Jun-Aug	Clusters of pink or pinkish-white flowers; also known as Sullivant's milkweed
common milkweed ^c	<i>Asclepias syriaca</i>	F	A	med. to fine sandy, clayey, or rocky calcareous; also well-drained loamy soil	3-5, up to 8	Jun-Aug	White to purple-colored blooms; not shade-tolerant; needs plenty of light
butterfly milkweed ^c	<i>Asclepias tuberosa</i>	F	D-A	sand, loam	2-3	Jun-Aug	Brilliant orange blooms

APPENDIX S-1. (cont.)

Herbs/forbs:

Milkweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
whorled milkweed ^c	<i>Asclepias verticillata</i>	F-P	D	sandy, clayey, or rocky	1-3	Jun-early Sept	Flowers small, greenish-white; narrow leaves whorl around stem
green comet milkweed	<i>Asclepias viridiflora</i>	F	D	sandy	1-3	Jun-Aug	Flowers greenish-white; thinly oblong (comet-shaped)
green antelopehorn ^c	<i>Asclepias viridis</i>	F	A-W	disturbed ground, limestone soils	1-3	Apr-Sept	Flowers greenish to yellow-white, with slight reddish purple center, clustered in umbel; named for horn shape of seed pods

APPENDIX S-1. (cont.)

Herbs/forbs:**Milkweed Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
honeyvine	<i>Cynanchum laeve</i>	F-P	D-W	prefers fertile, moist soil	stems 10' at maturity	Jun-Sept	Honeyvine can easily spread and is very difficult to eliminate; carefully evaluate your landscape plans before planting; extremely valuable plant to monarchs; sweet scent

APPENDIX S-1. (cont.)

Herbs/forbs:

Mint Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
blue giant hyssop	<i>Agastache foeniculum</i>	F-S	A	well-drained, sandy	2-4	Jul-Aug	Native mint; showy bluish-purple flowers in terminal spike
yellow giant hyssop	<i>Agastache nepetoides</i>	F-P	A	med., well-drained	4-6	Jul-Sept	Showy flowers creamy yellow in terminal spike
purple giant hyssop	<i>Agastache scrophulariifolia</i>	F-S	A	rich, moist	2-5	Jul-Sept	Flowers purplish-red in terminal spike
hairy pagoda-plant	<i>Blephilia hirsuta</i>	F-P	A	well-drained	2-3	May-Sept	Flowers blue to purple
wild bergamot	<i>Monarda fistulosa</i>	F-P	D-W	sand, loam, clay	2-5	Jul-early Sept	Cluster of lavender flowers, rarely white

APPENDIX S-1. (cont.)

Herbs/forbs:

Mint Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
obedient plant	<i>Physostegia virginiana</i>	F-P	A	humus-rich; loam, sand	2-4	Aug-Nov	Flowers snapdragon-like, but square stem typical of mints; pink to purple blooms; tolerates drought and poor drainage; easily moved
Virginia mountainmint	<i>Pycnanthemum virginianum</i>	P	A-W	moist, calcareous soils	2-3	Jul-Aug	Clusters of white flowers; mint aroma; can grow prolifically but less so in drier soils
pitcher sage (azure blue sage)	<i>Salvia azurea</i>	F-P	A-D	limestone-based, sandy, sandy loam, med. loam, clay loam, clay	3-5	Jul-Oct	Two-lipped, blue or white flowers, whorl around square stem and form a terminal spike-like cluster

APPENDIX S-1. (cont.)

Herbs/forbs:

Pea Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
groundplum milkvetch	<i>Astragalus crassicaarpus</i>	F-S	D-A	any but clay	1-3	late Apr-Jun	White, blue, and purple flowers
partridge pea	<i>Chamaecrista fasciculata</i>	F-P	D-A	deep, sandy, well-drained; clay, clay loam, med. loam, sandy loam, sandy, acid-based, calcareous	1-3	Jun-Oct	Flowers showy yellow with red center
white prairie clover	<i>Dalea candida</i>	F	A-D	sandy or rocky	1-2	May-Sept	Dense, white cylindrical flowers
roundhead prairie clover	<i>Dalea multiflora</i>	F	D	limestone, calcareous clays	1-3	Jun-Jul	Flowers white

APPENDIX S-1. (cont.)

Herbs/forbs:

Pea Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
purple prairie clover	<i>Dalea purpurea</i>	F	A-D	sand, loam, clay	1-2	May-early Sept	Dense, bright purple cylindrical flower spikes
silky prairie clover	<i>Dalea villosa</i>	F	D	sandy	1-2	Jul-Aug	Flowers pink to pale purple
showy ticktrefoil	<i>Desmodium canadense</i>	F	A-D	pH adaptable; sand, loam, clay, rocky	2-6	late Jun-early Sept	Showy flowers pink to purple; good for nitrogen fixation
roundhead lespedeza	<i>Lespedeza capitata</i>	F-P	A-D	sandy, loamy, or gravelly	2-4	Jun-Aug	Flowers cream with a pinkish throat
Great Basin lupine	<i>Lupinus ×alpestris</i>	F-P	D	well-drained	1-3	Apr-Jul	Slender flowers purple and white in clusters and spikes; good for nitrogen fixation
Nuttall's sensitive-briar	<i>Mimosa nuttallii</i>	F	A-D	various	vine may grow 4'	Jun-Sept	Flowers form pink globes

APPENDIX S-1. (cont.)

Herbs/forbs:

Phlox Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
prairie phlox	<i>Phlox andicola</i>	F	A-D	dry, sandy or gravelly	<2	Apr-Jun	Flowers star-shaped, white, or faintly bluish; dense growth under ideal conditions
wild blue phlox	<i>Phlox divaricata</i>	P-S	A	rich, moist, acidic, but also calcareous; sandy, sandy loam, med. loam, clay loam, clay	<2	Apr-Jun	Flower with 5 petals fused at base; pale blue to blue-violet to reddish purple, occasionally white
fall phlox	<i>Phlox paniculata</i>	F	A-W	organic, loam	2-4	Jun- early Sept	Showy flower clumps of pink to lavender, rarely white

APPENDIX S-1. (cont.)

Herbs/forbs:

Pondweed Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
largeleaf pondweed	<i>Potamogeton amplifolius</i>	F	W	hydric	2-3	Jul-Sept	Flowers green; aquatic plant
waterthread pondweed	<i>Potamogeton diversifolius</i>	F	W	hydric	2-3	Apr-May	Flowers red; aquatic plant
leafy pondweed	<i>Potamogeton foliosus</i>	F	W	hydric	<3	Jun-Aug	Flowers green; aquatic plant
Fries' pondweed	<i>Potamogeton friesii</i>	F	W	hydric	<1	Jul-Aug	Flowers green and brown; aquatic plant
variableleaf pondweed	<i>Potamogeton gramineus</i>	F	W	hydric	<3	Apr-May	Flowers green; aquatic plant

APPENDIX S-1. (cont.)

Herbs/forbs:**Rose Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Virginia strawberry	<i>Fragaria virginiana</i>	F-P	A-D	various; tolerates moderately acidic soil	<1, ground-hugging	mid Apr-Jun	Flowers white; edible berries; red fall color

APPENDIX S-1. (cont.)

Herbs/forbs:**Spiderwort Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
longbract spiderwort	<i>Tradescantia bracteata</i>	F-P	A-D	sandy	<2	May-early Jul	Flowers bluish-purple with 3 petals and bright yellow anthers

APPENDIX S-1. (cont.)

Herbs/forbs:**Spurge Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
flowering spurge	<i>Euphorbia corollata</i>	F-P	A-D	various; loam, clay, sand, gravel, rocky; tolerates poor soil	1-3	late Jun- Aug	Flowers white with green or yellow center

APPENDIX S-1. (cont.)

Herbs/forbs:

Verbena Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Dakota mock vervain	<i>Glandularia bipinnatifida</i>	P	A	well-drained sand, loam, clay, caliche, limestone	2	Mar–Oct	Flower clusters in shades of pink to purple
swamp verbena	<i>Verbena hastata</i>	F–S	A–W	moist, moderately acidic	2–5	Jun–Sept	Flowers small tubular, blue-violet clusters; good choice for riparian areas
hoary verbena	<i>Verbena stricta</i>	F	A–D	sand, loam	2–4	May–Sept	Flowers purple, lavender

APPENDIX S-1. (cont.)

Herbs/forbs:

Violet Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Nuttall's violet	<i>Viola nuttallii</i>	F	D-A	well-drained; sand, gravel	<1	Apr-Sept	Flowers yellow with back of upper petals often tinged with purple; lance-shaped leaves
birdfoot violet	<i>Viola pedata</i>	F-S	D-A	well-drained; shallow, sandy, rocky	<1	Mar-Jun	Large showy flowers pale to dark violet with deep orange anthers; named for leaf shape; tolerates drought
prairie violet	<i>Viola pedatifida</i>	F-P	A-D	well-drained; sand, loam	<1	mid Apr-early Jun	Flowers purple to blue-violet, 2 of the 5 petals have white hair-like tufts (bearded)

APPENDIX S-1. (cont.)

Herbs/forbs:**Violet Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
common blue violet	<i>Viola sororia</i>	F-P	W-A	moist, rich	<1	Mar-May	Flowers purple with white throat; leaves heart-shaped

APPENDIX S-1. (cont.)

Herbs/forbs:**Waterleaf Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
eastern waterleaf	<i>Hydrophyllum virginianum</i>	P-S	A-W	rich soils but may tolerate shallow soils and gravel	1-2	May-Jun	Flowers range in color from white to pale violet
silverleaf phacelia	<i>Phacelia hastata</i>	P	D-A	rocky	1-3	May-Jul	Flowers small white or pale purple in tight coiled cluster

APPENDIX S-1. (cont.)

Herbs/forbs:**Water-plantain Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
broadleaf arrowhead	<i>Sagittaria latifolia</i>	F-P	W	hydric, mud	3	Jul-Sept	Three-petaled flowers white with yellow center, arrowhead-shaped leaves

APPENDIX S-1. (cont.)

Herbs/forbs:**Wood Fern Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
ostrich fern	<i>Matteuccia struthiopteris</i>	P-S	A	moist, cool, sandy	2-8	N/A	Larval food source well-suited in riparian areas

APPENDIX S-1. (cont.)

Graminoids:

Grass Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
big bluestem	<i>Andropogon gerardii</i>	F-P	A-D	sand, loam, clay; acid or calcareous	4-8	Aug-Nov	Tan to maroon color in fall; drought-tolerant; can survive periodic flooding
sideoats grama	<i>Bouteloua curtipendula</i>	F-P	A-D	med. textured, well-drained; disturbed sites, igneous, limestone-based sand, loam, clay	2-3, rarely taller	Jun-Nov	Flowers hang from only one side of stem; drought-tolerant

APPENDIX S-1. (cont.)

Graminoids:

Grass Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
American mannagrass	<i>Glyceria grandis</i>	F	W	cannot tolerate high alkalinity	3–5	late May–early Sept	Cool-season grass; flowers purple; good choice for riparian areas and increasing soil stability; grows rapidly in spring and fall
little bluestem	<i>Schizachyrium scoparium</i>	F	A–D	well-drained; sandy, sandy loam, med. loam, clay loam, clay, limestone-based	2–3	Aug–Oct	Blue-green bunchgrass turns bronze and red in fall; larval food source
prairie dropseed	<i>Sporobolus heterolepis</i>	F	D	dry, sand, loam	2–4	Jul–Sept	Blooms of pink, yellow, green, or brown; fine-textured bunchgrass

APPENDIX S-1. (cont.)

Graminoids:

Sedge Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
river bulrush	<i>Bolboschoenus fluviatilis</i>	F-P	W-A	hydric, sand, loam, clay	5-7	late Jul-mid Aug	Yellowish-brown nodding flowers in spikelet
cosmopolitan bulrush	<i>Bolboschoenus maritimus</i>	F-S	W-A	hydric, fine clay, silt loam, sand, clay; tolerates pH up to 9.0	4-5	late Jul-Sept	Good choice for wetland erosion control
upright sedge	<i>Carex stricta</i>	F-P	A-W	sand, loam, peat	1-3	late May-Jul	Greenish or brownish spikes of inconspicuous flowers; actively grows when soil is cool during spring and fall

APPENDIX S-1. (cont.)

Graminoids:

Sedge Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
needle spikerush	<i>Eleocharis acicularis</i>	F	W–A	silt, sand, mud	<1	Apr–Sept, fruit	Small spikerush; grows in shallow water or wet ground
purple spikerush	<i>Eleocharis atropurpurea</i>	F	W	silt, sand, mud	<1	Jun–Oct, fruit	Small spikerush
flatstem spikerush	<i>Eleocharis compressa</i>	F	W	mucky, sandy, peaty, gravelly, rocky	1	Jun–Aug, fruit	Suitable for wetlands but may also grow in degraded sites
Engelmann's spikerush	<i>Eleocharis engelmannii</i>	F	W	sandy, peaty, muddy	1	Jun–Sept, fruit	Suitable for wetlands
bald spikerush	<i>Eleocharis erythropoda</i>	F	W–A	calcareous, alkaline pH of 7 to 8	<3	early Jun–Aug, fruit	Suitable for wetlands
pale spikerush	<i>Eleocharis macrostachya</i>	F–P	W	sand, loam, clay	1–3	Jun–Aug, fruit	Suitable for wetlands

APPENDIX S-1. (cont.)

Graminoids:

Sedge Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
blunt spikerush	<i>Eleocharis obtusa</i>	F-P	A-W	various; average, clay, sand, gravel, rock, acid, neutral, alkaline	<2	Jun-Oct, fruit	Suitable for wetlands
common spikerush	<i>Eleocharis palustris</i>	P	W	organic, silty clay, fine loam, often alkaline	1-3	Jun-Aug, fruit	Suitable for wetlands
fewflower spikerush	<i>Eleocharis quinqueflora</i>	F	W	sand, peat	<1	May-Aug, fruit	Suitable for wetlands
slender spikerush	<i>Eleocharis tenuis</i>	F	A-W	limestone; disturbed-sites	1-3	May-Jul, fruit	Suitable for wetlands
Wolf's spikerush ^d	<i>Eleocharis wolfii</i>	F	A-W	sand, silt, loam, clay, rock	<2	late May-Jul	Suitable for wetlands, wet prairies

APPENDIX S-1. (cont.)

Graminoids:

Sedge Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Hall's bulrush ^d	<i>Schoenoplectiella hallii</i>	F	W-A	fluctuating moisture, sandy, peaty	<2	Sept-Oct (fruit)	Flower clusters with 1-6 oval spikelets
hardstem bulrush	<i>Schoenoplectus acutus</i>	F	W	peat, coarse	5	Jun-Aug	Reddish-brown flowers; good choice for wetland soil stabilization
softstem bulrush	<i>Schoenoplectus tabernaemontani</i>	F-P	W	hydric	4-9	late May-Jul	Flowers nodding orange-brown spikelets
green bulrush	<i>Scirpus atrovirens</i>	F-P	W-A	hydric, clay, gravel, sand, organic material	2-4	Jun-Aug	Inflorescence dark brown, nearly black

APPENDIX S-1. (cont.)

Graminoids:**Rush Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
common rush	<i>Juncus effusus</i>	F-P	W	hydric, clay, loam, sand	2-4	Jul-Sept	Good choice for rain gardens and wetland soil stabilization
Torrey's rush	<i>Juncus torreyi</i>	F	W-A	sand, mud, clay	2-3	Jun-Aug	Yellowish-red flowers in starburst shape

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:

Aster Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
yellow rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	F	A-D	well-drained med. to coarse soil types	<4, 3' typical	Aug-Oct	Flowers golden; good food source for bees in fall; drought-tolerant
rubber rabbitbrush	<i>Ericameria nauseosa</i>	F	D	tolerates coarse, alkaline soils; disturbed sites	2-5, rarely 7	Aug-Oct	Flowers small yellow heads in dense cluster at end of stem; foliage white-gray; valuable food source for pollinators in fall

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Birch Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
American hazelnut	<i>Corylus americana</i>	P	A-D	variable; moist to dry, well-drained soils	6-12	Apr-Jun	Edible nuts; suckering

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Buckthorn Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
New Jersey tea	<i>Ceanothus americanus</i>	P-S	D-A	well-drained, mesic sand, loam, or limey; sandy, sandy loam, med. loam, limestone-based	3', up to 5'	late Apr-May	Flowers white

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Buckwheat Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
spreading buckwheat	<i>Eriogonum effusum</i>	F	D	well-drained; sandy, rocky	1–3	Jul–Sept	Flowers small white
alpine golden buckwheat	<i>Eriogonum flavum</i>	F	D	well-drained; sandy, rocky	1–2	Jun–Aug	Flowers bright yellow; can grow well in rock gardens

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Dogwood Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
roughleaf dogwood	<i>Cornus drummondii</i>	P-S	D-A	limestone-based, sandy, sandy loam, med. loam, clay loam, clay, acid-based, calcareous	up to 16'	Apr-Jun	Flowers creamy-yellow
silky dogwood	<i>Cornus obliqua</i>	F-P	W-A	clay, loam, sand	8-10	Jun	Greenish-white flower clusters; berries transform from white to blue

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:

Honeysuckle Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
limber honeysuckle	<i>Lonicera dioica</i>	P-S	D-A	various	5-10	May-Jun	Flowers arranged in whorl and reddish tubular with long yellow stamens; climbing vine-like shrub
American black elderberry	<i>Sambucus nigra canadensis</i>	S-F	A	prefers rich, moist, slightly acidic soil; tolerant	10-12	May-Jun	Showy white flowers in summer; edible fruit in Sept
coralberry	<i>Symphoricarpos orbiculatus</i>	F	A-D	well-drained sand, loam, clay	4-6	Apr-Jul	Large coral-pink to purple berries ripen in fall and persist through spring

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Madder Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
common buttonbush	<i>Cephalanthus occidentalis</i>	P-S	A-W	limestone-based, sandy, sandy loam, med. loam, clay loam, clay	6-12	Jun-Sept	Good choice for riparian areas; quick-rooting for soil stabilization

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Mustard Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
desert princesplume	<i>Stanleya pinnata</i>	F	D-A	sand, stone; thrives on selenium-rich soil	1-6	Apr-Aug	Flowers lemon yellow racemes

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:

Pea Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
leadplant	<i>Amorpha canescens</i>	F-P	D-A	sand, loam	2-3	Jun-Jul	Spikes of iridescent purple flowers; drought-tolerant and long-lived
false indigo bush	<i>Amorpha fruticosa</i>	F-P	A	acid-based, calcareous, pH adaptable; sandy, sandy loam, med. loam, clay loam, clay	5-12	May-Jul	Tubular-looking flowers small, purple to dark blue with long yellow stamens
dwarf false indigo	<i>Amorpha nana</i>	F	A-D	rocky or sandy soil	1-3	May-Jul	Dense tufts of fragrant purple flowers in late spring

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:

Rose Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
common serviceberry	<i>Amelanchier arborea</i>	S-F	A	moist, well-drained, acid soil	15-30	Apr-May	White flowers in spring; yellow, orange, and red-colored leaves in fall
common ninebark	<i>Physocarpus opulifolius</i>	F-S	A	clay, loam	3-10	May-Jun	White and pink flowers
chokecherry	<i>Prunus virginiana</i>	F-S	A	rich, moist soil; limestone-based, sandy, sandy loam, med. loam, clay loam, clay	20-30	May	White flowers become edible fruit with strong bitter flavor but rich in antioxidants

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:

Rose Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
prairie rose	<i>Rosa arkansana</i>	P-F	A-D	prefers well-drained; sandy, loamy, and heavy soils; tolerates heavy clay; acid, neutral, and basic (alkaline) soils	1-3	late May-Jul	Flowers white to deep pink
smooth rose	<i>Rosa blanda</i>	F	D	rocky	2-5	Jun-Aug	Pink to white flowers; few thorns
Allegheny blackberry	<i>Rubus allegheniensis</i>	F-P	A	various; well-drained, sand, loam, clay	3-6	late May-Jul	Flowers white; edible fruit

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Rose Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
northern dewberry	<i>Rubus flagellaris</i>	F-S	W-D	various; loam, clay-loam, sandy or rocky	1 or up to 4 if erect	May-Jun	Flowers white, vine-like

APPENDIX S-1. (cont.)

Shrubs and sub-shrubs:**Sumac Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
smooth sumac	<i>Rhus glabra</i>	F	D	dry, sandy, sandy loam med. loam, clay loam, clay, caliche	10–20	May–Aug	Velvety red fruit on female plants persist into winter

APPENDIX S-1. (cont.)

Trees:

Beech Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
white oak	<i>Quercus alba</i>	F	A-D	deep, moist, well-drained, loam, sand, med. loam, clay loam, clay, acid-based	80 to >100	Mar-May	Brown to red wine-colored leaves in the fall
bur oak	<i>Quercus macrocarpa</i>	F	A-D	variable soils	80-100	Mar-May	Mild yellow-brown leaves in the fall
Northern red oak	<i>Quercus rubra</i>	S-P	A	well-drained, loamy sand	75-100	Mar-May	Russet to bright red color in the fall; grows rapidly

APPENDIX S-1. (cont.)

Trees:**Birch Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
hophornbeam	<i>Ostrya virginiana</i>	S-P	A	well-drained; variable, tolerates rocky soil	30-50	Apr	Cream-colored fruit looks like hops; yellow color in fall

APPENDIX S-1. (cont.)

Trees:**Elm Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
common hackberry	<i>Celtis occidentalis</i>	F	A	rich, moist soil	60–100	Feb–Apr	Yellowish in fall

APPENDIX S-1. (cont.)

Trees:**Horse-chestnut Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
Ohio Buckeye	<i>Aesculus glabra</i>	F-P	A	rich, deep soil	50-100	Mar-May	Greenish-yellow flowers in spring, yellow to orange flowers in fall

APPENDIX S-1. (cont.)

Trees:**Linden Family**

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
American basswood	<i>Tilia americana</i>	P	A	moist, rich, well-drained, loamy soil	60–80	Apr–Jul	Fruit is round and hangs in cluster, ripening in the fall; attracts bees that use the flowers to make strongly-flavored honey

APPENDIX S-1. (cont.)

Trees:**Maple Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
silver maple	<i>Acer saccharinum</i>	F-P	W-A	alluvial deposits	75-100	Mar-Apr	Delicate maple-leaf foliage; first of the maples in North America to bloom

APPENDIX S-1. (cont.)

Trees:**Olive Family**

Common name	Scientific name	Sun exposure^a	Soil moisture^b	Soil description	Height (ft)	Bloom period	Notes
white ash	<i>Fraxinus americana</i>	F-P	A	any deep, moist soil	75–120	Apr–May	Produces yellow, deep purple, and maroon fall color
green ash	<i>Fraxinus pennsylvanica</i>	F	A	sand, loamy to clayey	50–75	Apr–Jun	Yellow fall color; grows rapidly

APPENDIX S-1. (cont.)

Trees:

Pea Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
eastern redbud	<i>Cercis canadensis</i>	S-P	A-D	moist, fertile, well-drained	15-30	Mar-May	Clusters of rosy-pink flowers in spring
Kentucky coffeetree	<i>Gymnocladus dioica</i>	F	A	deep, rich, moist sandy loams or silty clays	75-100	late May-Jun	Greenish-white flowers are fragrant on the female plant; drought-resistant

APPENDIX S-1. (cont.)

Trees:

Plane-tree Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
American sycamore	<i>Platanus occidentalis</i>	F-P	W-A	moist, sandy loam or silty clay	60-100	Mar-Apr	Produces round, brown 1" fruit; mottled white bark; leaves drop throughout summer

APPENDIX S-1. (cont.)

Trees:

Rose Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
downy hawthorn	<i>Crataegus mollis</i>	F-P	A-D	variable	35-50	May-Jun	White spring flowers become orange-red fruit
prairie crab apple	<i>Malus ioensis</i>	F	A-D	well-drained loam	20-35	May-Jun	Fragrant white to pink flowers become very tart fruit; suckering
American plum	<i>Prunus americana</i>	F-P	A-D	moist, rich, well-drained loam	20-35	Apr-May	Fragrant white flowers in spring; yellow to red fruit in summer
black cherry	<i>Prunus serotina</i>	F-P	A	well-drained, variable	25-110; variable size classes	Mar-Jun	Small edible berries in summer

APPENDIX S-1. (cont.)

Trees:

Walnut Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
shagbark hickory	<i>Carya ovata</i>	F-P	A	any well-drained fertile soil	60-80	Mar-Jun	Yellow to golden-brown in fall
black walnut	<i>Juglans nigra</i>	F-P	A	moist, rich soils; sandy loam, med. loam, clay loam, acid-based, calcareous	50-75, up to 150	Apr-May	Fruit consists of three layers; tree produces chemical that can be toxic to other plant species if planted too close

APPENDIX S-1. (cont.)

Trees:

Willow Family

Common name	Scientific name	Sun exposure ^a	Soil moisture ^b	Soil description	Height (ft)	Bloom period	Notes
eastern cottonwood	<i>Populus deltoides</i>	F	W-A	moist soils; sandy, sandy loam, med. loam, clay loam, clay	80-100	Feb-Apr	Cottony ¼”-long seeds mature over summer; leaves are dark green in summer and fade in fall to shades of light green, yellow, and brown
Missouri River willow	<i>Salix eriocephala</i>	F	A-W	sandy	<20	Feb-Mar	Good choice for riparian areas; quick rooting for soil stabilization

^a Sun exposure: F = full sun, P = part sun, and S = shade.

^b Soil moisture: W = wet, A = average, and D = dry.

^c Species of milkweed recommended because of local occurrence, availability for planting, and appeal to monarchs.

^d Tier I at-risk species in the Nebraska Natural Legacy Project (Schneider et al. 2011).