



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet* (IS-MO723pc)

## Plant Characteristics

Specific plant characteristics have been identified for each of the grass, legume, and forb species that will be seeded in Missouri. Use the following information to determine site adaptability and species compatibility when developing a seeding mixture. Refer to the following definitions for specific guidance for each characteristic.

### Definitions:

**Common Name:** Name used in Missouri for a specific plant.

**Genus Name:** Taxonomic category for first word in a scientific name.

**Species Name:** Taxonomic category for second word in a scientific name.

**Growth Habit:** Growth form: grass, grass-like, forb, shrub, or tree.

**Duration:** Life cycle: annual, biennial or perennial.

**US Native:** Species native to the United States: native or introduced. (Some species occur as native stands with introduced cultivars also present and sometimes dominate.)

**Wetland Indicator Status:** Code to indicate plants occurrence in wetlands, refer to “National List of Vascular Plant Species that occur in wetlands” US Fish and Wildlife Service Biological Report 88, US Fish and Wildlife Service, 1988.

**Active Growth Period:** Season when active plant development occurs.

**Growth Form:** Description of plant shoots at or below ground level.

**Growth Rate:** Relative rate of plant development during active growth period: slow, moderate, or rapid.

**Regrowth after Harvest:** Relative rate of plant regrowth after harvesting by grazing or cutting.

**Bloat:** Swollen or inflated reaction to consuming a plant species: none, low, medium, or high.

**C:N Ratio:** Relative amount of carbon to nitrogen in the plant: low, medium, or high.

**Mature Height:** Average plant height at end of growing season.

**Lifespan:** Relative length of productive life: short, moderate, or long.

**Nitrogen Fixation:** Symbiotic relationship with bacteria to produce nitrogen shape and orientation: yes or no.

**Shape and Orientation:** Profile of plant development and growth: prostrate, decumbent, semi-erect, or erect.

**Toxicity:** Presence of toxins: none or slight.



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet* (IS-MO723pc)

**Flower Color:** Prominent color of the flowers in bloom.

**Course Textured Soil Species:** Adapted to sands or loamy sands: yes or no.

**Medium Textured Soil Species:** Adapted to sandy loams, loam, silt loam or silts: yes or no.

**Fine Textured Soil Species:** Adapted to sandy clay, silty clay or clay: yes or no.

**Anaerobic Tolerance:** Relative adaption to wet sites and occasional ponding: none, low, medium, or high.

**CaCO<sub>3</sub> Tolerance:** Relative adaption to calcium carbonate in the surface soil: none, low, medium, or high.

**Moisture Use:** Relative requirement for water through the active growth period: low, medium, or high.

**pH, Minimum:** Lowest pH (water) for establishment and productive growth.

**pH, Maximum:** Highest pH (water) for establishment and productive growth.

**Drought Tolerance:** Relative adaption to severe water shortages during active growth period: low, medium or high.

**Fertility Requirement:** Relative need for Nitrogen, Phosphorus and Potassium: low, medium or high.

**Root Depth, Minimum:** Minimum soil depth for plant establishment.

**Salinity Tolerance:** Relative adaption to soil soluble salts: none, low, medium or high.

**Shade Tolerance:** Relative adaption to sites with limited sunlight: intolerant, intermediate, or tolerant.

**Temperature Minimum:** Climate regime for plant survival in degrees Fahrenheit.

**Vegetative Spread Rate:** Relative speed for expanding area of coverage with stolons or rhizomes: none, slow, moderate, or rapid.

**Seed Spread Rate:** Relative speed for expanding population from seed production and distribution: slow, moderate, or rapid.

**Seedling Vigor:** Relative measure of seedling development: low, medium, or high.

**Palatable Browse:** Relative comparison of leaves, young shoots, and other vegetative growth consumed by goats and deer: low, medium, or high.

**Palatable Graze:** Relative comparison of leaves, young shoots, and other vegetative growth consumed by grazers such as cattle, horses, and sheep: low, medium, or high.

**Protein Potential:** Relative comparison of protein amount available to browsers and grazers: low, medium, or high.



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

## Cool Season Legumes:

CHARACTERISTICS OF COOL-SEASON LEGUMES						
Common Name	Birdsfoot Trefoil	Alsike Clover	Ladino Clover	Red Clover	Kura Clover	Alfalfa
<b>Genus Name</b>	<i>Lotus</i>	<i>Trifolium</i>	<i>Trifolium</i>	<i>Trifolium</i>	<i>Trifolium</i>	<i>Medicago</i>
<b>Species Name</b>	<i>corniculatus</i>	<i>hybridum</i>	<i>repens</i>	<i>pratense</i>	<i>ambiguum</i>	<i>sativa</i>
<b>Growth Habit</b>	Forb	Forb	Forb	Forb	Forb	Forb
<b>Duration</b>	Perennial	Annual	Perennial	Biennial	Perennial	Perennial
<b>U.S. Native</b>	Introduced	Introduced	Introduced	Introduced	Introduced	Introduced
<b>Wetland Indicator Status</b>	FACU-, FAC	FACU-, FAC	FACU-, FAC	UPL, FAC	FAC	UPL
<b>Active Growth Period</b>	Spring, summer	Spring, summer	Spring	Spring, summer	Spring	Spring to fall
<b>Growth Form</b>	Single crown	Single crown	Stoloniferous	Single crown	Rhizomatous	Single crown
<b>Growth Rate</b>	Moderate	Rapid	Moderate	Rapid	Slow	Rapid
<b>Regrowth after Harvest</b>	Rapid	Moderate	Moderate	Moderate	Moderate	Rapid
<b>Bloat</b>	None	High	Low	High	Low	High
<b>C:N Ratio</b>	Low	Low	Low	Low	Low	Low
<b>Mature Height</b>	1.2 feet	2.0 feet	0.7 feet	2.0 feet	1.5 feet	2.0 feet
<b>Lifespan</b>	Moderate	Short	Moderate	Short	Moderate	Long
<b>Nitrogen Fixation</b>	High	High	Medium	High	Medium	High
<b>Shape and Orientation</b>	Semi-erect	Semi-erect	Prostrate	Erect	Prostrate	Erect
<b>Toxicity</b>	None	Slight	Slight	None	Slight	None
<b>Flower Color</b>	Yellow	Pink or white	White	Red	Red	Purple
<b>Coarse Textured Soil</b>	Yes	No	No	Yes	No	No
<b>Medium Textured Soil</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Fine Textured Soil</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Anaerobic Tolerance</b>	Medium	High	Medium	None	Low	None
<b>CaCO3 Tolerance</b>	Medium	Medium	Medium	Medium	Medium	High
<b>Moisture Use</b>	Medium	High	Medium	Medium	Medium	High
<b>pH, minimum</b>	5.0	6.0	6.0	6.0	6.0	6.0



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

<b>CHARACTERISTICS OF COOL-SEASON LEGUMES</b>						
<b>Common Name</b>	<b>Birdsfoot Trefoil</b>	<b>Alsike Clover</b>	<b>Ladino Clover</b>	<b>Red Clover</b>	<b>Kura Clover</b>	<b>Alfalfa</b>
<b>pH, maximum</b>	7.7	7.5	7.5	7.5	7.4	8.5
<b>Drought Tolerance</b>	Medium	Low	Low	Low	Medium	High
<b>Fertility Requirement</b>	Medium	Medium	Medium	Medium	Medium	High
<b>Root Depth, minimum</b>	14 inches	12 inches	12 inches	12 inches	12 inches	24 inches
<b>Salinity Tolerance</b>	Medium	Low	Low	Low	None	Low
<b>Shade Tolerance</b>	Intolerant	Intolerant	Intermediate	Intolerant	Intolerant	Intolerant
<b>Temperature, minimum</b>	-33	-38	-39	-24	-28	-43
<b>Vegetative Spread Rate</b>	None	None	Rapid	None	Slow	Slow
<b>Seed Spread Rate</b>	Slow	Slow	Moderate	Slow	Slow	Slow
<b>Seedling Vigor</b>	Medium	Medium	Low	High	Low	High
<b>Palatable Browse</b>	High	High	High	High	High	High
<b>Palatable Graze</b>	High	High	High	High	High	High
<b>Protein Potential</b>	High	High	High	High	High	High



# Plant Characteristics Information Sheet

Conservation Practice Information Sheet

(IS-MO723s)

## Warm Season Legumes:

CHARACTERISTICS OF WARM-SEASON LEGUMES						
Common Name	Common Lespedeza	Illinois Bundleflower	Partridge Pea	Roundhead Bushclover	Showy Ticktrefoil	Purple Prairieclover
<b>Genus Name</b>	<i>Kummerowia</i>	<i>Desmanthus</i>	<i>Chamaecrista</i>	<i>Lespedeza</i>	<i>Desmodium</i>	<i>Dalea</i>
<b>Species Name</b>	<i>striata, stipulacea</i>	<i>illinoensis</i>	<i>fasciculata</i>	<i>capitata</i>	<i>canadense</i>	<i>Purpurea</i>
<b>Growth Habit</b>	Forb	Forb	Forb	Forb	Forb	Forb
<b>Duration</b>	Annual	Perennial	Annual	Perennial	Perennial	Perennial
<b>U.S. Native</b>	Introduced	Native	Native	Native	Native	Native
<b>Wetland Indicator Status</b>	FACU	UPL, FAC	FACU	UPL, FACU	FAC-	
<b>Active Growth Period</b>	Spring, summer	Spring, summer	Spring	Summer	Summer	Spring, summer
<b>Growth Form</b>	Multiple stem	Multiple stem	Bunch	Multiple stem	Multiple stem	Multiple stem
<b>Growth Rate</b>	Rapid	Moderate	Rapid	Slow	Rapid	Moderate
<b>Regrowth after Harvest</b>	Slow	Moderate	None	Slow	Slow	Slow
<b>Bloat</b>	Low	None	None	None	None	Low
<b>C:N Ratio</b>	Low	Medium	Low	Medium	?	Medium
<b>Mature Height</b>	0.6 feet	3.0 feet	2.4 feet	2.6 feet	4.0 feet	3.0 feet
<b>Lifespan</b>	Short	Long	Short	Long	Moderate	Moderate
<b>Nitrogen Fixation</b>	Medium	High	Medium	Medium	Medium	Low
<b>Shape and Orientation</b>	Decumbent	Erect	Erect	Erect	Erect	Erect
<b>Toxicity</b>	Slight	None	Slight	None	None	None
<b>Flower Color</b>	White	White	Yellow	White	Purple	Purple
<b>Coarse Textured Soil</b>	Yes	Yes	Yes	Yes	No	Yes
<b>Medium Textured Soil</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Fine Textured Soil</b>	Yes	Yes	No	No	Yes	Yes
<b>Anaerobic Tolerance</b>	Low	None	None	None	Low	None
<b>CaCO<sub>3</sub> Tolerance</b>	Low	Medium	?	Medium	Medium	Medium
<b>Moisture Use</b>	Low	Medium	Medium	Low	Low	Medium
<b>pH, minimum</b>	6.0	5.0	5.5	5.7	5.0	6.0
<b>pH, maximum</b>	7.5	8.0	7.5	8.2	7.5	8.0
<b>Drought Tolerance</b>	High	Medium	Medium	High	Medium	Medium
<b>Fertility Requirement</b>	Low	Medium	Medium	Low	Low	Medium



# Plant Characteristics Information Sheet

Conservation Practice Information Sheet

(IS-MO723s)

CHARACTERISTICS OF WARM-SEASON LEGUMES						
Common Name	Common Lespedeza	Illinois Bundleflower	Partridge Pea	Roundhead Bushclover	Showy Ticktrefoil	Purple Prairieclover
Root Depth, minimum	8 inches	12 inches	14 inches	18 inches	?	16 inches
Salinity Tolerance	Low	None	None	None	None	None
Shade Tolerance	Intolerant	Intolerant	Tolerant	Intolerant	Tolerant	Intolerant
Temperature, minimum	8	-18	-3	-28	-30	-38
Vegetative Spread Rate	None	None	None	None	None	None
Seed Spread Rate	Rapid	Slow	Rapid	Slow	Moderate	Slow
Seedling Vigor	High	High	High	Low	High	Medium
Palatable Browse	Low	High	High	Medium	High	Medium
Palatable Graze	Medium	High	Medium	Low	Medium	Medium
Protein Potential	Low	High	High	Medium	Medium	High



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

## Cool Season Grasses:

CHARACTERISTICS OF COOL-SEASON GRASSES										
Common Name	Canada Wildrye	Virginia Wildrye	Kentucky Bluegrass	Orchardgrass	Perennial Ryegrass	Redtop	Reed Canarygrass	Smooth Brome	Tall Fescue	Timothy
<b>Genus Name</b>	<i>Elymus</i>	<i>Elymus</i>	<i>Poa</i>	<i>Dactylis</i>	<i>Lolium</i>	<i>Agrostis</i>	<i>Phalaris</i>	<i>Bromus</i>	<i>Schedonorus</i>	<i>Phleum</i>
<b>Species Name</b>	<i>canadensis</i>	<i>virginicus</i>	<i>pratensis</i>	<i>glomerata</i>	<i>perenne</i>	<i>gigantea</i>	<i>arundinacea</i>	<i>inermis</i>	<i>phoenix</i>	<i>pratense</i>
<b>Growth Habit</b>	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass
<b>Duration</b>	Perennial	Perennial	Perennial	Perennial	Perennial, annual	Perennial	Perennial	Perennial	Perennial	Perennial
<b>U.S. Native</b>	Native	Native	Native, introduced	Introduced	Introduced	Introduced	Native, introduced	Native, introduced	Introduced	Introduced
<b>Wetland Indicator Status</b>	FACU, FAC	FAC, FACW	UPL, OBL	UPL, FACU	FACU-, FAC	FAC	FACW, OBL	UPL	FACU+	FACU
<b>Active Growth Period</b>	Spring, summer	Spring	Spring, summer	Spring and fall	Spring and fall	Spring, summer	Spring to fall	Spring, fall	Spring, fall	Spring, summer
<b>Growth Form</b>	Bunch	Bunch	Rhizomatous	Bunch	Bunch	Rhizomatous	Rhizomatous	Rhizomatous	Rhizomatous	Bunch
<b>Growth Rate</b>	Rapid	Moderate	Moderate	Moderate	Rapid	Rapid	Rapid	Moderate	Rapid	Rapid
<b>Regrowth after Harvest</b>	Moderate	Slow	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Rapid	Moderate
<b>Bloat</b>	None	None	None	None	None	Low	None	None	None	None
<b>C:N Ratio</b>	Medium	Medium	Low	Low	Low	Medium	Medium	Medium	Low	Low
<b>Mature Height</b>	3.0 feet	2.8 feet	1.5 feet	3.0 feet	3.5 feet	2.0 feet	5.0 feet	2.5 feet	3.0 feet	3.0 feet
<b>Lifespan</b>	Short	Short	Long	Moderate	Short	Short	Long	Long	Moderate	Moderate
<b>Nitrogen Fixation</b>	No	No	No	No	No	No	No	No	No	No
<b>Shape and Orientation</b>	Erect	Erect	Erect	Erect	Erect	Decumbent	Erect	Erect	Semi-erect	Erect
<b>Toxicity</b>	None	None	None	None	None	None	Slight	None	Slight	None
<b>Coarse Textured Soil</b>	Yes	Yes	No	No	No	No	No	No	No	No
<b>Medium Textured Soil</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Fine Textured Soil</b>	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

<b>CHARACTERISTICS OF COOL-SEASON GRASSES</b>										
<b>Common Name</b>	<b>Canada Wildrye</b>	<b>Virginia Wildrye</b>	<b>Kentucky Bluegrass</b>	<b>Orchardgrass</b>	<b>Perennial Ryegrass</b>	<b>Redtop</b>	<b>Reed Canarygrass</b>	<b>Smooth Brome</b>	<b>Tall Fescue</b>	<b>Timothy</b>
<b>Anaerobic Tolerance</b>	Low	Medium	Low	Low	Low	Medium	High	Low	Low	Low
<b>CaCO3 Tolerance</b>	High	Medium	High	Low	Medium	Low	Medium	Low	High	High
<b>Moisture Use</b>	Medium	Medium	High	Medium	High	Medium	High	Medium	Medium	Medium
<b>pH, minimum</b>	5.0	5.0	5.0	5.0	5.0	4.5	5.5	5.5	5.0	5.0
<b>pH, maximum</b>	7.9	7.4	8.4	7.5	8.0	8.0	8.0	8.0	9.0	7.8
<b>Drought Tolerance</b>	Medium	Medium	Low	Medium	Low	Low	Low	Medium	Medium	Low
<b>Fertility Requirement</b>	Medium	Medium	High	Medium	High	Low	High	High	Medium	Medium
<b>Root Depth, minimum</b>	16 inches	12 inches	10 inches	12 inches	10 inches	14 inches	14 inches	12 inches	12 inches	10 inches
<b>Salinity Tolerance</b>	Medium	None	Medium	Low	Medium	Low	Medium	Low	Medium	Low
<b>Shade Tolerance</b>	Tolerant	Tolerant	Intolerant	Tolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intermediate	Intermediate
<b>Temperature, minimum</b>	-32	-28	-38	-33	-18	-38	-38	-38	-38	-38
<b>Vegetative Spread Rate</b>	None	None	Rapid	None	None	Rapid	Rapid	Rapid	Slow	None
<b>Seed Spread Rate</b>	Moderate	Moderate	Slow	Slow	Moderate	Slow	Slow	Slow	Moderate	Slow
<b>Seedling Vigor</b>	High	Medium	Low	High	High	High	Low	High	High	Medium
<b>Palatable Browse</b>	Medium	Medium	High	Medium	Low	High	Low	Medium	Low	High
<b>Palatable Graze</b>	Medium	Low	High	High	High	High	Medium	High	Medium	High
<b>Protein Potential</b>	Medium	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

## Warm Season Grasses:

CHARACTERISTICS OF WARM-SEASON GRASSES										
Common Name	Bermudagrass	Big Bluestem	Oldworld Bluestem	Composite Dropseed	Eastern Gamagrass	Indiangrass	Little Bluestem	Sideoats Grama	Southern Crabgrass	Switchgrass
<b>Genus Name</b>	<i>Cynodon</i>	<i>Andropogon</i>	<i>Bothriochloa</i>	<i>Sporobolus</i>	<i>Tripsacum</i>	<i>Sorghastrum</i>	<i>Schizachyrium</i>	<i>Bouteloua</i>	<i>Digitaria</i>	<i>Panicum</i>
<b>Species Name</b>	<i>dactylon</i>	<i>gerardii</i>	(various species)	<i>compositus</i>	<i>dactyloides</i>	<i>nutans</i>	<i>scoparium</i>	<i>curtipendula</i>	<i>ciliaris</i>	<i>virgatum</i>
<b>Growth Habit</b>	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass	Grass
<b>Duration</b>	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Annual	Perennial
<b>U.S. Native</b>	Introduced	Native	Introduced	Native	Native	Native	Native	Native	Introduced	Native
<b>Wetland Indicator Status</b>	FACU, FAC	FACU, FAC	FAC	FACU	FAC, FACW	UPL, FACW	FACU	FACU	FAC	UPL, FACW
<b>Active Growth Period</b>	Spring to fall	Summer	Summer	Spring, summer	Spring, summer	Summer, fall	Summer, fall	Summer	Summer, fall	Summer
<b>Growth Form</b>	Stoloniferous	Bunch	Bunch	Bunch	Bunch	Bunch	Bunch	Rhizomatous	Stoloniferous	Rhizomatous
<b>Growth Rate</b>	Rapid	Moderate	Rapid	Moderate	Rapid	Moderate	Moderate	Moderate	Rapid	Rapid
<b>Regrowth after Harvest</b>	Rapid	Moderate	Rapid	Slow	Rapid	Moderate	Moderate	Moderate	Moderate	Moderate
<b>Bloat</b>	Low	Low	Low	None	None	None	None	None	None	None
<b>C:N Ratio</b>	Low	Medium	Medium	Medium	Low	Medium	Medium	Medium	Low	Medium
<b>Mature Height</b>	1.4 feet	6.0 feet	3.0 feet	3.0 feet	5.0 feet	6.0 feet	3.0 feet	3.0 feet	0.9 feet	5.0 feet
<b>Lifespan</b>	Long	Long	Moderate	Long	Long	Long	Long	Moderate	Short	Long
<b>Nitrogen Fixation</b>	No	No	No	No	No	No	No	No	No	No
<b>Shape and Orientation</b>	Prostrate	Erect	Semi-erect	Erect	Erect	Erect	Erect	Erect	Decumbent	Erect
<b>Toxicity</b>	None	None	None	None	None	None	None	None	None	None
<b>Coarse Textured Soil</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Medium Textured Soil</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Fine Textured Soil</b>	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Anaerobic Tolerance</b>	High	Medium	None	None	Medium	Low	None	None	Low	Medium
<b>CaCO3 Tolerance</b>	Medium	High	Medium	Low	None	High	High	Medium	Medium	Low



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

<b>CHARACTERISTICS OF WARM-SEASON GRASSES</b>										
<b>Common Name</b>	<b>Bermudagrass</b>	<b>Big Bluestem</b>	<b>Oldworld Bluestem</b>	<b>Composite Dropseed</b>	<b>Eastern Gamagrass</b>	<b>Indiangrass</b>	<b>Little Bluestem</b>	<b>Sideoats Grama</b>	<b>Southern Crabgrass</b>	<b>Switchgrass</b>
<b>Moisture Use</b>	High	Low	Medium	Low	High	Medium	Low	Medium	Medium	Medium
<b>pH, minimum</b>	5.0	6.0	5.0	5.5	5.1	4.8	5.0	5.5	5.0	4.5
<b>pH, maximum</b>	8.0	7.5	8.0	7.0	7.5	8.0	8.4	8.5	7.0	8.0
<b>Drought Tolerance</b>	Medium	High	High	High	Low	Medium	High	Medium	Low	Medium
<b>Fertility Requirement</b>	High	Low	High	Low	High	Low	Low	Medium	Medium	High
<b>Root Depth, minimum</b>	14 inches	20 inches	18 inches	10 inches	20 inches	24 inches	14 inches	12 inches	5 inches	12 inches
<b>Salinity Tolerance</b>	High	Medium	Low	None	None	Medium	None	Low	None	Medium
<b>Shade Tolerance</b>	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant	Intolerant
<b>Temperature, minimum</b>	-8	-46	-23	-38	-23	-38	-38	-43	2	-43
<b>Vegetative Spread Rate</b>	Rapid	Slow	Slow	Slow	Moderate	Moderate	None	Slow	Rapid	Slow
<b>Seed Spread Rate</b>	Slow	Slow	Rapid	Slow	Slow	Slow	Moderate	Slow	Rapid	Slow
<b>Seedling Vigor</b>	Low	Low	High	Medium	Low	Medium	Low	Medium	Low	Medium
<b>Palatable Browse</b>	Medium	Medium	Low	Low	High	Medium	Medium	Medium	Medium	Medium
<b>Palatable Graze</b>	High	High	Low	Medium	High	High	High	High	High	High
<b>Protein Potential</b>	Medium	Medium	Low	Low	High	Medium	Medium	Medium	High	Medium



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

## Warm Season Native Forbs:

CHARACTERISTICS OF WARM-SEASON NATIVE FORBS				
Common Name	Grayhead Coneflower	Pale Purple Coneflower	Ox-eye Falsesunflower	Wild Bergamot
<i>Genus Name</i>	<i>Ratibida</i>	<i>Echinacea</i>	<i>Heliopsis</i>	<i>Monarda</i>
<i>Species Name</i>	<i>pinnata</i>	<i>pallida</i>	<i>helianthoides</i>	<i>fistulosa</i>
<b>Growth Habit</b>	Forb	Forb	Forb	Forb
<b>Duration</b>	Perennial	Perennial	Perennial	Perennial
<b>U.S. Native</b>	Native	Native	Native	Native
<b>Wetland Indicator Status</b>	UPL	UPL	UPL	UPL, FAC+
<b>Active Growth Period</b>	Spring, summer	Spring, summer	Spring, summer	Spring
<b>Growth Form</b>	Single crown	Single stem	Single crown	Single stem
<b>Growth Rate</b>	Moderate	Moderate	Moderate	Moderate
<b>Regrowth after Harvest</b>	Slow	Slow	Slow	Slow
<b>Bloat</b>	None	None	None	None
<b>C:N Ratio</b>	Medium	Medium	Medium	?
<b>Mature Height</b>	4.0 feet	1.2 feet	4.0 feet	4.9 feet
<b>Lifespan</b>	Moderate	Long	Short	Moderate
<b>Nitrogen Fixation</b>	No	No	No	No
<b>Shape and Orientation</b>	Erect	Erect	Erect	Erect
<b>Flower Color</b>	Yellow	White to purple	Yellow	Red
<b>Coarse Textured Soil</b>	Yes	Yes	Yes	No
<b>Medium Textured Soil</b>	Yes	Yes	Yes	Yes
<b>Fine Textured Soil</b>	No	Yes	No	Yes
<b>Anaerobic Tolerance</b>	None	None	None	High
<b>CaCO<sub>3</sub> Tolerance</b>	Low	Low	Low	Medium
<b>Moisture Use</b>	Medium	Medium	Low	High
<b>pH, minimum</b>	5.6	6.5	5.6	6.0
<b>pH, maximum</b>	6.8	7.2	6.8	8.0
<b>Drought Tolerance</b>	Medium	Medium	High	None
<b>Fertility Requirement</b>	Medium	Low	Medium	Medium
<b>Root Depth, minimum</b>	14 inches	14 inches	10 inches	4 inches



# Plant Characteristics Information Sheet

*Conservation Practice Information Sheet (IS-MO723s)*

<b>CHARACTERISTICS OF WARM-SEASON NATIVE FORBS</b>				
<b>Common Name</b>	<b>Grayhead Coneflower</b>	<b>Pale Purple Coneflower</b>	<b>Ox-eye Falsesunflower</b>	<b>Wild Bergamot</b>
<b>Salinity Tolerance</b>	None	Low	None	None
<b>Shade Tolerance</b>	Intolerant	Intolerant	Intermediate	Intermediate
<b>Temperature, minimum</b>	-38	-33	-18	-32
<b>Vegetative Spread Rate</b>	None	None	None	Slow
<b>Seed Spread Rate</b>	Slow	Slow	Slow	Slow
<b>Seedling Vigor</b>	Medium	Medium	Low	Medium
<b>Palatable Browse</b>	Medium	Low	Medium	Medium
<b>Palatable Graze</b>	Medium	Low	Medium	Medium
<b>Protein Potential</b>	Low	Medium	Medium	?