

Little Bluestem Bedrock Bluff Prairie

Site Characteristics: Stands are typically small and occur on very thin soils on limestone ridges and steep hillsides, usually with a southwestern aspect. These dry prairie soils occupy the highest position on the moisture catena and may be less than 10 cm deep over extensive areas. Loam and silt soils appear to be the most common; however, some communities occur on predominantly sandy soils. Many sites that support this community are underlain by limestone or chalk deposits.

Vegetation Characteristics: The vegetation is structurally very stable, moderately sparse to dense, and typically dominated by grasses less than 1m tall. Graminoid cover is greater than 30% with dominants being *Little Bluestem* (25-60% cover), *Sideoats Grama* (25-60% cover), *Prairie Dropseed*, and *Big Bluestem*. *Blue Grama* and *Hairy Grama* may be co-dominant species and other associated to co-dominant graminoids are *Few-flowered Aristida*, *Sand Bluestem* (sandier soils), *Buffalograss*, *Prairie Sandreed* (sandier soils), *Slim-leaved Panic Grass*, *Needleleaf Sedge*, *Sun Sedge*, *Prairie Junegrass*, *Western Wheatgrass*, *Rough Rush Grass*, *Sand Dropseed*, *Prairie Dropseed*, *Porcupine Grass*, and *Needle-and-Thread*. A great number of forbs occur in this community, although they do not make up a large part of the herbaceous canopy. Forb cover ranges between 10-25%, with common species including *Leadplant*, *Silky Aster*, *Purple Prairie Clover*, *Flowering Spurge*, *Gray Goldenrod*, *Rock Sandwort*, *Whorled Milkweed*, *White Heath Aster*, *Blacksamson Echinacea*, *Western Ragweed*, *Scarlet Gaura*, *Dotted Blazingstar*, *Skeletonweed*, *Long-headed Coneflower*, *Scarlet Mallow*, *Plains Mubly*, *Prairie Turnip*, and *Prairie Smoke*. Species typical of communities found along the Mississippi River include *Aromatic Aster* and *Small Skullcap*. Trees may be present, but tree canopy cover is less than 10%. Shrubs are not abundant, but *Buckbrush*, *Soapweed*, *Prairie Sagewort*, and *Rose species* may be scattered among the herbaceous species or locally abundant.



Range: This little bluestem bluff prairie community occurs primarily in the Driftless Area of northeastern Iowa

Iowa NRCS Plant Community Description

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Conservation Status: G3- Vulnerable

Management Considerations: In general, the abundance or dominance of *Schizachyrium scoparium* and *Bouteloua curtipendula* are good indicators of this alliance. This community occurs on slopes that have thinner soils, greater insolation, and greater runoff than surrounding areas. These factors inhibit the growth of taller grasses and woody species and allow the midgrass communities to be maintained. Fire is not as important as in more mesic grasslands, because drought conditions slow encroachment by woody species. The proportion of tall grasses to short grasses is typically negatively correlated and varies with the specific community and site. Tall grasses may be more prevalent on sandier soils and on moderate or gentle lower slopes. The short grasses tend to be more common on flat uplands or steep slopes with heavier soils.

PRAIRIE, LITTLE BLUESTEM BEDROCK BLUFF						
SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
<i>Ambrosia artemisiifolia</i>	Common ragweed	Herbaceous Layer	A-FORB	0	113682	
<i>Ambrosia psilostachya</i>	Western ragweed	Herbaceous Layer	P-FORB	2	67429	
<i>Amorpha canescens</i>	Lead plant	Shrub Layer	SUB-SHRUB, LEGUME	8	256000	
<i>Andropogon gerardii</i>	Big bluestem	Herbaceous Layer, Dominant	P-GRASS, WARM SEASON	4	160000	
<i>Andropogon hallii</i>	Sand bluestem	Herbaceous Layer	P-GRASS, WARM SEASON	7	96640	SC
<i>Aristida purpurea longiseta</i>	Few-flowered aristata	Herbaceous Layer	P-GRASS, WARM SEASON	10		
<i>Artemisia campestris caudata</i>	Western sagewort	Herbaceous Layer	B-FORB	4	4000000	
<i>Artemisia frigida</i>	Prairie sagewort	Shrub Layer	SUB-SHRUB	4	4536000	SC
<i>Asclepias lanuginosa</i>	Wooly milkweed	Herbaceous Layer	P-FORB	9		T
<i>Asclepias verticillata</i>	Whorled milkweed	Herbaceous Layer	P-FORB	0	176000	
<i>Asclepias viridiflora</i>	Green milkweed	Herbaceous Layer	P-FORB	6	57600	
<i>Bouteloua curtipendula</i>	Side-oats grama	Herbaceous Layer, Dominant	P-GRASS, WARM SEASON	6	96000	
<i>Bouteloua dactyloides</i>	Buffalo grass	Herbaceous Layer	P-GRASS, WARM SEASON	7		SC
<i>Bouteloua gracilis</i>	Blue grama	Herbaceous Layer	P-GRASS, WARM SEASON	8	640000	
<i>Bouteloua hirsuta</i>	Hairy grama	Herbaceous Layer	P-GRASS, WARM SEASON	7	1120000	
<i>Brickellia eupatorioides</i>	False boneset	Herbaceous Layer	SUB-SHRUB	5	512000	
<i>Calamovilfa longifolia</i>	Prairie sandreed	Herbaceous Layer	P-GRASS, WARM SEASON	7	274000	

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SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
<i>Carex duriuscula</i>	Needleleaf sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	10		
<i>Carex inops</i>	Sun Sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	6		
<i>Castilleja sessiliflora</i>	Downy painted cup	Herbaceous Layer	SUB-SHRUB, HEMIPARASITE	10	3200000	
<i>Coreopsis palmata</i>	Tickseed, prairie coreopsis	Herbaceous Layer	P-FORB	7	160000	
<i>Dalea purpurea</i>	Purple prairie clover	Herbaceous Layer	P-FORB, LEGUME	8	288000	
<i>Dichanthelium linearifolium</i>	Slim-leaved panic grass	Herbaceous Layer	P-GRASS, COOL SEASON	6		T
<i>Echinacea angustifolia</i>	Purple coneflower	Herbaceous Layer	P-FORB	8	112000	
<i>Echinacea pallida</i>	Pale coneflower	Herbaceous Layer	P-FORB	7	83200	
<i>Erigeron strigosus</i>	Daisy fleabane	Herbaceous Layer	P-FORB	2	250000	
<i>Euphorbia corollata</i>	Flowering spurge	Herbaceous Layer	P-FORB	3	128000	
<i>Gaura coccinea</i>	Scarlet gaura	Herbaceous Layer	P-FORB	7	22400	
<i>Geum triflorum</i>	Prairie smoke	Herbaceous Layer	P-FORB	8	432000	
<i>Hedeoma hispidum</i>	Rough pennyroyal	Herbaceous Layer	A-FORB	2		
<i>Hesperostipa comata</i>	Needle-and-thread	Herbaceous Layer	P-GRASS, COOL SEASON	7	256000	SC
<i>Hesperostipa spartea</i>	Porcupine grass	Herbaceous Layer	P-GRASS, COOL SEASON	6	10880	
<i>Koeleria macrantha</i>	June grass	Herbaceous Layer	P-GRASS, COOL SEASON	7	3200000	
<i>Liatris cylindracea</i>	Blazing star	Herbaceous Layer	P-FORB	10	224000	
<i>Liatris punctata</i>	Dotted blazing star	Herbaceous Layer	P-FORB	8	112000	
<i>Lithospermum incisum</i>	Fringed puccoon	Herbaceous Layer	P-FORB	5	96509	
<i>Lygodesmia juncea</i>	Skeletonweed	Herbaceous Layer	P-FORB	7		
<i>Minuartia michauxii</i>	Rock sandwort	Herbaceous Layer	P-FORB	10	3840000	SC
<i>Muhlenbergia cuspidata</i>	Plains muhly	Herbaceous Layer	P-GRASS, WARM SEASON	10	2880000	
<i>Oligoneuron album</i>	Stiff aster	Herbaceous Layer	P-FORB	9	1024000	
<i>Pascopyrum smithii</i>	Western wheatgrass	Herbaceous Layer	P-GRASS, COOL SEASON	2	115008	
<i>Pedimelum esculentum</i>	Prairie turnip	Herbaceous Layer	P-FORB, LEGUME	8	17600	
<i>Photinia melanocarpa</i>	Black chokeberry	Shrub Layer	SHRUB	10	256000	E
<i>Physalis heterophylla</i>	Ground cherry	Herbaceous Layer	P-FORB	2		

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PRAIRIE, LITTLE BLUESTEM BEDROCK BLUFF						
SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
<i>Pulsatilla patens multifida</i>	Pasque flower	Herbaceous Layer	P-FORB	8	288000	
<i>Ratibida columnifera</i>	Long-headed coneflower	Herbaceous Layer	P-FORB	4	320000	
<i>Rosa</i> spp.	Wildrose	Shrub Layer	SUB-SHRUB			
<i>Schizachyrium scoparium</i>	Little bluestem	Herbaceous Layer, Dominant	P-GRASS, WARM SEASON	5	240000	
<i>Scutellaria parvula</i>	Small skullcap	Herbaceous Layer	P-FORB	7		
<i>Solidago nemoralis</i>	Field goldenrod	Herbaceous Layer	P-FORB	4	4800000	
<i>Sphaeralcea coccinea</i>	Scarlet mallow	Herbaceous Layer	SUB-SHRUB	9	500000	T
<i>Sporobolus clandestinus</i>	Rough rush grass	Herbaceous Layer	P-GRASS, WARM SEASON	3	480000	SC
<i>Sporobolus cryptandrus</i>	Sand dropseed	Herbaceous Layer	P-GRASS, WARM SEASON	3	5600080	
<i>Sporobolus heterolepis</i>	Prairie dropseed	Herbaceous Layer, Dominant	P-GRASS, WARM SEASON	9	256000	
<i>Symphoricarpos occidentalis</i>	Wolfberry, buckbrush	Shrub Layer	SHRUB	0	75033	
<i>Symphyotrichum ericoides</i>	Heath aster, frost weed	Herbaceous Layer	P-FORB	3	3200000	
<i>Symphyotrichum oblongifolium</i>	Aromatic aster	Herbaceous Layer	P-FORB	10	816000	
<i>Symphyotrichum sericeum</i>	Silky aster	Herbaceous Layer	P-FORB	10	896000	
<i>Verbena stricta</i>	Hoary vervain	Herbaceous Layer	P-FORB	1	448000	
<i>Yucca glauca</i>	Soapweed	Shrub Layer	SUB-SHRUB	10	28800	

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