

ECOLOGICAL SITE QUICK REFERENCE

MLRA 67A

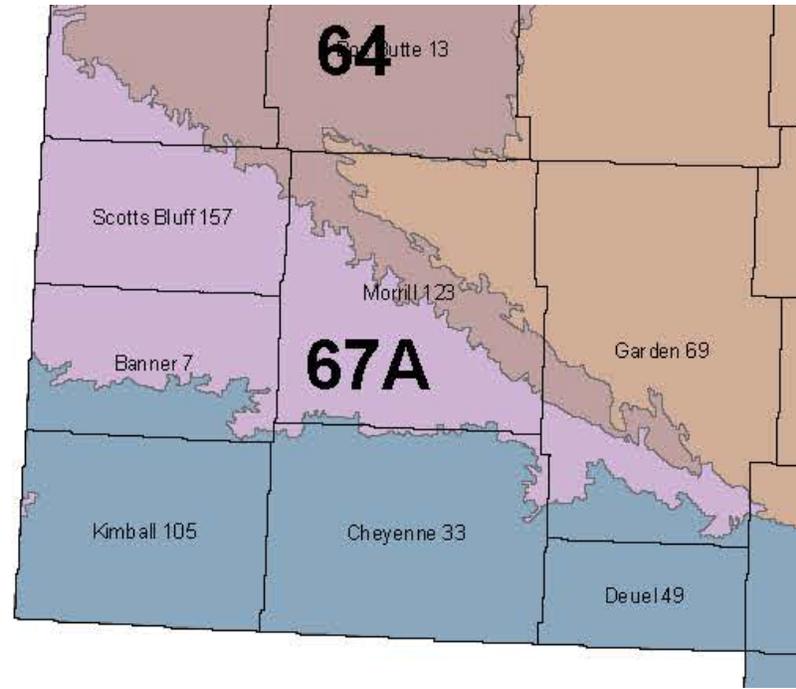


MLRA 67A North INDEX

Ecological Site Key		Page 4
Choppy Sands	R067AY102WY	Page 5
Clayey	R067AY104WY*	Page 7
Clayey Overflow	R067AY106WY	Page 9
Gravelly	R067AY112WY	Page 11
Gravelly Loamy	R067AY114WY	Page 13
Limy Upland	R067AY120WY	Page 15
Loamy	R067AY122WY	Page 17
Loamy Lowland	R067AY124WY	Page 19
Loamy Overflow	R067AY126WY	Page 21
Rocky Hills	R067AY134WY*	Page 23
Saline Lowland	R067AY138WY	Page 25
Saline Subirrigated	R067AY142WY	Page 27
Saline Upland	R067AY144WY	Page 29
Sands	R067AY146WY	Page 31
Sandy	R067AY150WY	Page 33
Sandy Lowland	R067AY152WY	Page 35
Shallow Limy	R067XY019NE; R067XY040NE	Not Developed
Shallow Loamy	R067AY162WY	Page 37
Shallow Sandy	R067AY166WY	Page 39
Subirrigated	R067AY174WY	Page 41
Shallow to Gravel	R067XY041NE	Not Developed
Very Shallow	R067AY176WY*	Page 43
Wetland	R067AY178WY	Page 45
MLRA 67A Plant List		Page 47

*No Nebraska soil map units are associated with this site. Additional information is available at:
<https://esis.sc.egov.usda.gov> or click on the site name above to go directly to specific site information.

Location Map for Major Land Resource Area (MLRA) 67A – Central High Plains (North)

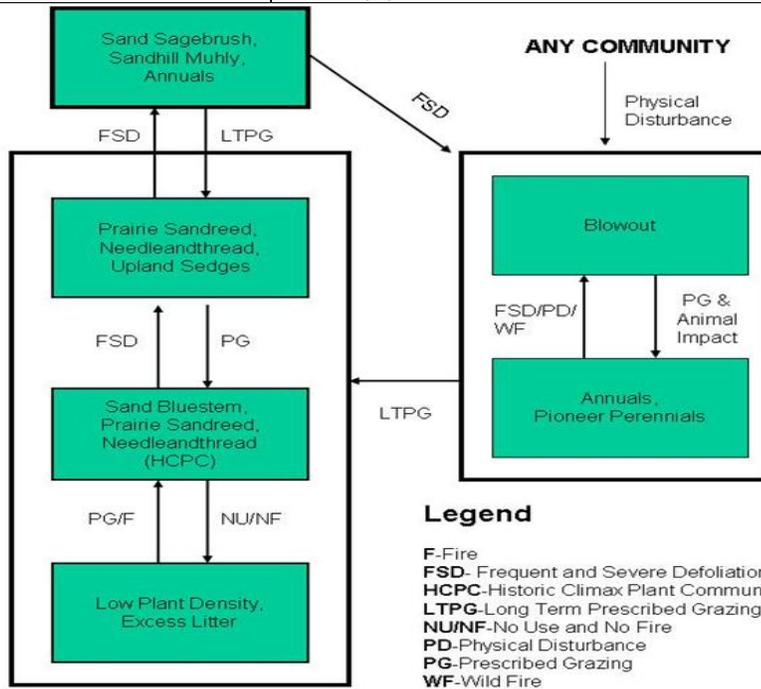


Last Update: 4/22/2014

SITE: CHOPPY SANDS – R067AY102WY 15-17” precipitation

SITE DESCRIPTION: This site occurs on steep irregular slopes characterized by stabilizing dunes and blowouts. The soils of this site are deep to very deep and excessively drained. Soils formed in eolian deposits from sandstone. These soils have rapid permeability. The surface soils will be loamy very fine sand, loamy fine sand, loamy sand or sand.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Sand Bluestem / Prairie Sandreed / Needleandthread	The potential vegetation is about 75-90% grasses, 5-10% forbs, and 5-15% woody plants. The major tall and mid-grasses include prairie sandreed, little bluestem, sand bluestem, and needleandthread. Other grasses and grass-likes include Indian ricegrass, prairie junegrass, and sand lovegrass. A variety of forbs and half-shrubs also occur. Major shrubs include yucca and sand sagebrush.	1300	0.36	0.43
Prairie Sandreed / Needleandthread / Upland Sedges	Dominant grasses and grass-likes include prairie sandreed, needleandthread, and upland sedges. Secondary grasses include needleandthread and Indian ricegrass. Sand bluestem and little bluestem are present in smaller amounts.. The significant forbs include dotted gayfeather, cudweed sagewort, spiderworts, and western ragweed. Shrubs include yucca, sand sagebrush, and Arkansas rose.	950	0.26	0.31
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include prairie sandreed, needleandthread, and sand bluestem. Other species include sand dropseed and upland sedge. Dominant forbs include annual sunflower, fringed sagewort, and ten-petal mentzelia. The dominant shrub is cactus.	900	0.25	0.30
Sand Sagebrush / Sandhills Muhly / Annuals	The dominant grasses are sandhill muhly, sand dropseed, and hairy grama. Other perennial grasses present include prairie sandreed, blowout grass and upland sedges. Significant forbs include western ragweed, green sagewort, annual sunflower, and bractless mentzelia. Significant shrubs include sand sagebrush, yucca, and pricklypear cactus.	550	0.15	0.18
Blowout	Blowouts are very dynamic and result in a soil surface that will resist revegetation. Dominant grasses are sandhill muhly, blowout grass, and sandbur. All other grasses are absent. Lemon scurfpea and western ragweed are common.	100	.03	.03
Annual / Pioneer Perennials	This plant community occurs as the blowout plant community becomes vegetated. The plant composition is made up annuals with a few species of perennial forbs and grasses that are very dry tolerant. The dominant grasses include blowout grass and sandhill muhly. Annual grasses such as sandbur and stinkgrass have increased. The dominant forbs include lemon scurfpea and annual sunflower. Prairie sandreed, hairy grama and Arkansas rose are secondary species.	250	0.07	0.08



Choppy Sands (15-17" Precipitation) – Sand Bluestem / Prairie Sandreed / Needleandthread (HCPC)

COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASSLIKES				
Warm Season Tall Grasses			390-780	30-60
Sand Bluestem	Andropogon halli	ANHA	65-390	5-30
Prairie Sandreed	Calamovilfa longifolia	CALO	325-585	35-45
Switchgrass	Panicum virgatum	PAV12	0-130	0-10
Warm Season Mid-Grasses			65-260	5-20
Little Bluestem	Schizachyrium scoparium	SCSC	130-195	10-15
Sand Lovegrass	Eragrostis trichodes	ERTR3	0-130	0-10
Needlegrasses			65-195	5-15
Needleandthread	Hesperostipa comata	HECO26	65-195	5-15
Other Perennial Grasses and Grasslikes			195-260	15-20
Blowout Grass	Refieldia flexuosa	REFL	0-65	0-5
Blue Grama	Bouteloua gracilis	BOGR2	0-65	0-5
Hairy Grama	Bouteloua hirsuta	BOH12	0-65	0-5
Indianricegrass	Achnatherum hymenoides	ACHY	0-65	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-65	0-5
Rosette Grass	Dichanthelium sp.	DICHA2	0-65	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-65	0-5
Sandhill Muhly	Muhlenbergia pungens	MUPU2	0-65	0-5
Sedge	Carex sp.	CAREX	0-65	0-5
Thin Paspalum	Paspalum setaceum	PASE5	0-65	0-5
Other Perennial Grasses		2GP	0-65	0-5
FORBS			65-130	5-10
Beardtounge	Penstemon sp.	PENST	0-26	0-2
Bractless Blazingstar	Mentzelia nuda	MENU	0-26	0-2
Bush Morning Glory	Ipomea leptophylla	IPLE	0-26	0-2
Chalk Hill Hymenopappus	Hymenopappus tenuifolius	HYTE2	0-26	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-26	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-26	0-2
Evening Primrose	Oenothera sp.	OENOT	0-26	0-2
False Boneset	Brickellia eupatoriodes	BREU	0-26	0-2
Field Sagewort	Artemisia campestris	ARCA12	0-26	0-2
Flaxflowered Ipomopsis	Ipomopsis longiflora	IPLO2	0-26	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-26	0-2
Ironweed	Vernonia sp.	VERNO	0-26	0-2
Lemon Scurfpea	Psoralidium lanceolatum	PSLA3	0-26	0-2
Manystem Pea	Lathyrus polymorphus	LAPO2	0-26	0-2
Prairie Clover	Dalea sp.	DALEA	0-26	0-2
Rush Skeletonplant	Lygodesmia juncea	LYJU	0-26	0-2
Silky Prairie Clover	Dalea vilosa	DAVI	0-26	0-2
Spiderwort	Tradescantia sp.	TRADE	0-26	0-2
Stiff Sunflower	Helianthus pauciflorus	HEPA19	0-26	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-26	0-2
Veiny Dock	Rumex venosus	RUVE2	0-26	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-26	0-2
Other Perennial Forbs		2FP	0-65	
SHRUBS			65-195	5-15
Brittle Cactus	Opuntia fragilis	OPFR	0-26	0-2
Plains Pricklypear	Opuntia polyacantha	OPPO	0-26	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-26	0-2
Sand Sagebrush	Artemisia filifolia	ARF12	0-65	0-5
Small Soapweed	Yucca glauca	YUGL	0-65	0-5
Western Sandcherry	Prunus pumila var. besseyi	PRPUB	0-26	0-2
Other Shrubs		2SHRUB	0-65	0-5

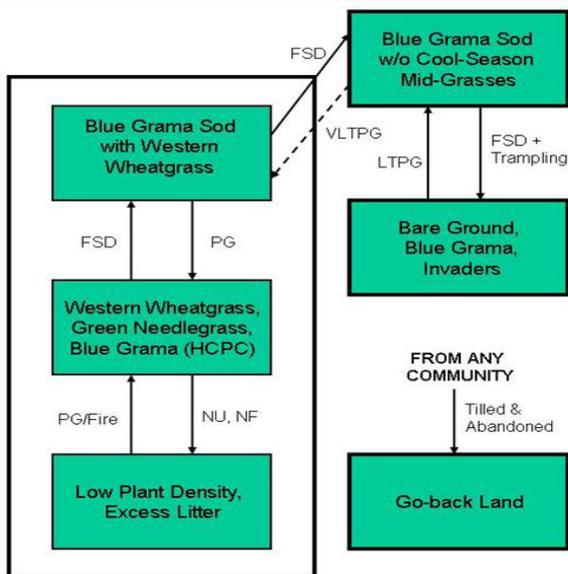
Annual Production lbs. /acre	LOW	RV*	HIGH
TOTAL	750	1300	1750

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: CLAYEY R067AY104WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on nearly level to gently sloping uplands on hills, alluvial fans and stream terraces. The soils of this site are moderately deep (greater than 20 inches to bedrock) to very deep, well drained soils that formed in alluvium or alluvium over residuum. These soils have slow permeability. Layers of soil most influential to the plant community varies from 4 to 8 inches thick. These soils may develop deep cracks.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Western Wheatgrass / Green Needlegrass / Blue Grama	The potential vegetation is about 80-90% grasses, 5-10% forbs, and 5-10% woody plants. The community is dominated by cool season mid-grasses. The major grasses include western wheatgrass and green needlegrass. Other grasses occurring include blue grama, prairie junegrass, and Sandberg bluegrass. A variety of forbs and half-shrubs can also occur. Shrubs are not abundant.	1300	0.36	0.43
Blue Grama Sod / Western Wheatgrass	The dominant grasses are blue grama and western wheatgrass. Western wheatgrass is reduced, and green needlegrass is nearly absent. Other grasses present may include Sandberg bluegrass and prairie junegrass. Forbs present may include scarlet globemallow, hairy goldaster, wild onion, death camas, slim-flowered scurfpea, and skeletonweed. Fringed sagewort and broom snakeweed are common shrubs.	950	0.26	0.31
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include western wheatgrass and green needlegrass. Kentucky bluegrass has invaded. Cactus and sageworts are common. Noxious weeds such as Dalmatian toadflax, leafy spurge or Canada thistle may invade.	1200	0.33	0.39
Blue Grama Sod / Cool Season Mid-grass	The dominant grass is blue grama. Other grasses include buffalograss and threeawns. The common forbs include scarlet globemallow, wild onion, death camas, slim-flowered scurfpea, and skeletonweed.	600	0.16	0.20
Bare Ground / Blue Grama / Invaders	The dominant grasses include threeawns, blue grama, and buffalograss. Annual grasses such as cheatgrass and sixweeks fescue are common. The dominant perennial forbs include curlycup gumweed, green sagewort, and hairy goldaster. Broom snakeweed is common.	600	0.16	0.20
Go-Back	The composition can include some remnant tame pasture grasses and a variety of pioneer perennial species. The dominant grasses include threeawn, sand dropseed, Sandberg bluegrass, annual bromes, and sixweeks fescue. Other grasses may include crested wheatgrass, little bluestem, western wheatgrass, and needleandthread.	600	0.16	0.20



FSD - Frequent and Severe Defoliation of the Cool-season Mid-grasses
 HCPC - Historic Climax Plant Community
 LTPG - Long-term Prescribed Grazing
 NU, NF - No Use, No Fire
 PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)
 VLTPG - Very Long-term Prescribed Grazing (could take generations)

Clayey (15-17" precipitation) – Western Wheatgrass / Green Needlegrass / Blue Grama (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Wheatgrasses			585-650	25-50
Western Wheatgrass	Pascopyrum smithii	PASM	585-650	25-50
Needlegrasses			195-325	15-25
Green Needlegrass	Nassella viridula	NAVI4	195-325	15-25
Blue Grama			65-130	5-10
Blue Grama	Bouteloua gracilis	BOGR2	65-130	5-10
Other Perennial Grasses and Grass-likes			130-260	10-20
Buffalograss	Bouteloua dactyloides	BODA2	0-65	0-5
Little Bluestem	Schizachyrium scoparium	SCSC	0-65	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-65	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-65	0-5
Threawn	Aristida sp.	ARIST	0-26	0-2
Threadleaf Sedge	Carex filifolia	CAFI	0-65	0-5
Other Perennial Grasses		2GP	0-65	0-5
FORBS			65-195	5-15
American Vetch	Vicia americana	VIAM	0-26	0-2
Beardtongue	Penstemon sp.	PENST	0-26	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-26	0-2
Desert Parsley	Lomatium sp.	LOMAT	0-26	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-26	0-2
Field Sagewort	Artemisia campestris	ARCA12	0-26	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-26	0-2
Indian Breadroot	Pediomelum sp.	PEDIO2	0-26	0-2
Larkspur	Delphinium sp.	DELPH	0-26	0-2
Meadow Deathcamas	Zigadenus venenosus	ZIVE	0-26	0-2
Milkvetch	Astragalus sp.	ASTRA	0-26	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-26	0-2
Scarlet Beeblossom	Gaura coccinea	GACO5	0-26	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-26	0-2
Scurfpea	Psoraleidum sp.	PSORA2	0-26	0-2
Textile Onion	Allium textile	ALTE	0-26	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-26	0-2
Violet Prairie Clover	Dalea purpurea	DAPU5	0-26	0-2
White Prairie Clover	Dalea candida	DACA7	0-26	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-26	0-2
Other Perennial Forbs		2FP	0-65	0-5
SHRUBS			65-130	5-10
Big Sagebrush	Artemisia tridentata	ARTR2	0-65	0-5
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-26	0-2
Fourwing Saltbush	Atriplex canescens	ATCA2	0-65	0-5
Leadplant	Amorpha canescens	AMCA6	0-26	0-2
Plains Prickly pear	Opuntia polycantha	OPPO	0-26	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-26	0-2
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-26	0-2
Yellow Rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	0-26	0-2
Winterfat	Krascheninnikovia lanata	KRLA2	0-65	0-5
Other Shrubs		2SHRUB	0-65	0-5

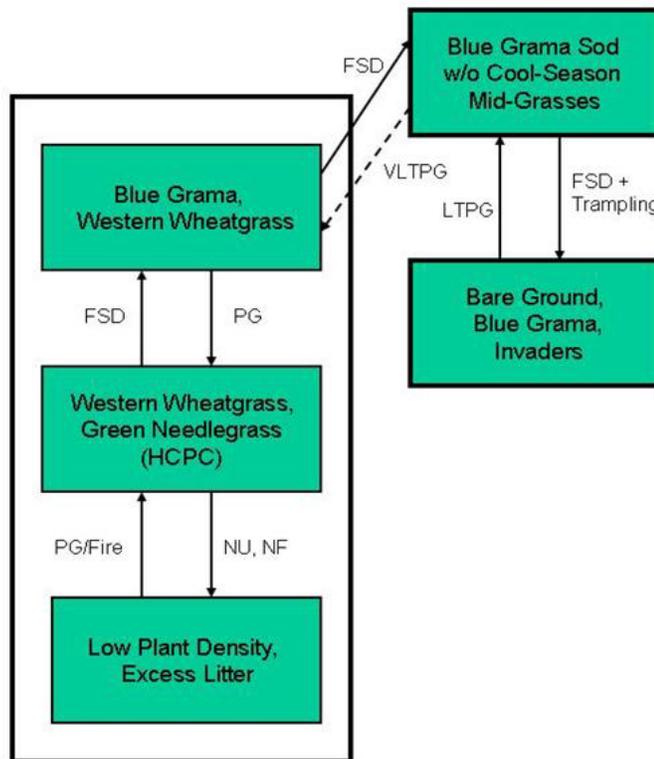
Annual Production lbs. /acre	LOW	RV*	HIGH
TOTAL	900	1300	1700

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: CLAYEY OVERFLOW R067AY106WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on nearly level areas - alluvial fans and stream terraces - that receive additional water from overflow of intermittent streams or runoff from adjacent slopes. The soils of this site are deep and well drained that formed in alluvium from sedimentary rock. These soils have slow permeability and may develop severe cracks.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Western Wheatgrass / Green Needlegrass	The potential vegetation is about 85-95% grasses, 5-10% forbs, and 0-5% woody plants. The community is dominated by cool season mid-grasses. The major grasses include western wheatgrass and green needlegrass. Other grasses include blue grama, prairie junegrass, and Sandberg bluegrass.	2000	0.55	0.66
Blue Grama / Western Wheatgrass	The dominant grasses are blue grama and western wheatgrass. Green needlegrass is present as remnant. Other grasses present may include buffalograss and prairie junegrass. Forbs present may include scarlet globemallow and hairy goldaster.	1500	0.41	0.49
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include western wheatgrass and green needlegrass. Kentucky bluegrass has invaded. Cactus and sageworts are common. Noxious weeds such as Dalmatian toadflax, leafy spurge or Canada thistle may invade.	1800	0.49	0.59
Blue Grama Sod	The dominant grass is blue grama. Other grasses include buffalograss and threeawns. Cool season mid-grasses have been eliminated or nearly eliminated. Common forbs include scarlet globemallow and hairy goldaster.	1000	0.27	0.33
Blue Grama / Invaders	The dominant grasses include threeawns, blue grama, and buffalograss. Annuals such as kochia and cheatgrass have invaded.	1000	0.27	0.33



- FSD - Frequent and Severe Defoliation of the Cool-season Mid-grasses
- HCPC - Historic Climax Plant Community
- LTPG - Long-term Prescribed Grazing
- NU, NF - No Use, No Fire
- PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)
- VLTPG - Very Long-term Prescribed Grazing (could take generations)

CLAYEY OVERFLOW (15-17" Precipitation) – Western Wheatgrass / Green Needlegrass (HCPC)

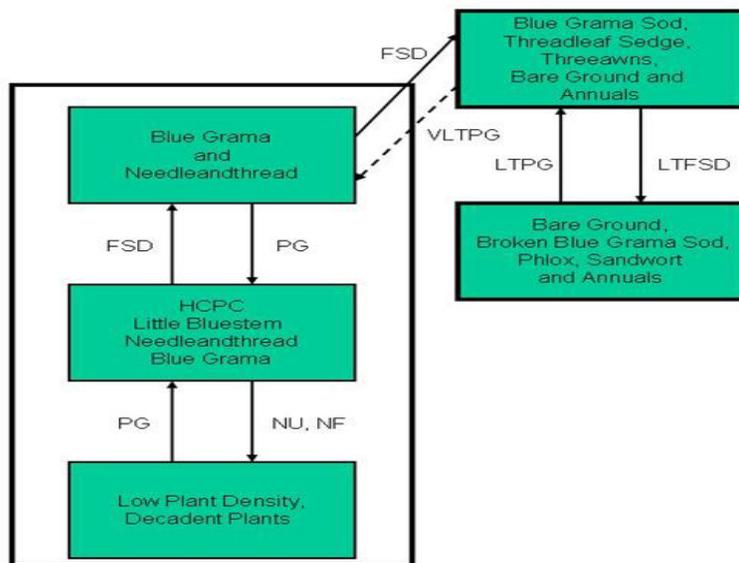
COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition		
GRASSES & GRASS-LIKES						
Cool Season Grasses			1200-1500	60-75		
Green Needlegrass	Nassella viridula	NAVI4	300-500	15-25		
Western Wheatgrass	Pascopyrum smithii	PASM	900-1000	45-50		
Sideoats Grama			0-200	0-10		
Sideoats Grama	Bouteloua curtipendula	BOCU	0-200	0-10		
Other Perennial Grasses and Grass-likes			200-500	10-25		
Blue Grama	Bouteloua gracilis	BOGR2	0-100	0-5		
Buffalograss	Bouteloua dactyloides	BODA2	0-100	0-5		
Canada Wildrye	Elymus canadensis	ELCA4	0-100	0-5		
Prairie Junegrass	Koeleria macrantha	KOMA	0-100	0-5		
Sandberg Bluegrass	Poa secunda	POSE	0-100	0-5		
Slender Wheatgrass	Elymus trachycaulus	ELTR7	0-100	0-5		
Switchgrass	Panicum virgatum	PAVI2	0-100	0-5		
Threeawn	Aristida sp.	ARIST	0-40	0-2		
Threadleaf Sedge	Carex filifolia	CAFI	0-100	0-5		
Other Perennial Grasses		2GP	0-100	0-5		
FORBS			100-300	5-15		
American Vetch	Vicia americana	VIAM	0-40	0-2		
Beardtongue	Penstemon sp.	PENST	0-40	0-2		
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-40	0-2		
Desert Parsley	Lomatium sp.	LOMAT	0-40	0-2		
Dotted Blazing Star	Liatris punctata	LIPU	0-40	0-2		
Field Sagewort	Artemisia campestris	ARCA12	0-40	0-2		
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-40	0-2		
Indian Breadroot	Pediomelum sp.	PEDIO2	0-40	0-2		
Larkspur	Delphinium sp.	DELPH	0-40	0-2		
Meadow Deathcamas	Zigadenus venenosus	ZIVE	0-40	0-2		
Milkvetch	Astragalus sp.	ASTRA	0-40	0-2		
Prairie Sagewort	Artemisia frigida	ARFR4	0-40	0-2		
Scarlet Beeblossom	Gaura coccinea	GACO5	0-40	0-2		
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-40	0-2		
Scurfpea	Psoraleum sp.	PSORA2	0-40	0-2		
Textile Onion	Allium textile	ALTE	0-40	0-2		
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-40	0-2		
Violet Prairie Clover	Dalea purpurea	DAPU5	0-40	0-2		
White Prairie Clover	Dalea candida	DACA7	0-40	0-2		
White Sagebrush	Artemisia ludoviciana	ARLU	0-40	0-2		
Other Perennial Forbs		2FP	0-100	0-5		
SHRUBS			0-200	0-10		
Big Sagebrush	Artemisia tridentata	ARTR2	0-100	0-5		
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-40	0-2		
Fourwing Saltbush	Atriplex canescens	ATCA2	0-100	0-5		
Leadplant	Amorpha canescens	AMCA6	0-40	0-2		
Plains Prickly pear	Opuntia polyacantha	OPPO	0-40	0-2		
Prairie Rose	Rosa arkansana	ROAR3	0-40	0-2		
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-40	0-2		
Silver Sagebrush	Artemisia cana	ARCA13	0-100	0-5		
Yellow Rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	0-40	0-2		
Winterfat	Krascheninnikovia lanata	KRLA2	0-40	0-2		
Other Shrubs		2SHRUB	0-100	0-5		
			Annual Production lbs. /acre	LOW	RV*	HIGH
			TOTAL	1000	2000	3000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: GRAVELLY R067AY112WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on terraces, hillslopes, alluvial fans and outwash fans. The soils of this site are very deep and well drained to excessively drained. Soils formed in calcareous alluvium and have moderately rapid to rapid permeability. Runoff is slow to medium.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Little Bluestem / Needleandthread /Blue Grama	The potential vegetation is about 75-85% grasses, 15-20% forbs, and 0-5% woody plants. Mid-grasses dominate the community. The principal grasses are little bluestem, blue grama and needleandthread. Secondary grasses are sideoats grama, bluebunch wheatgrass and western wheatgrass. Threadleaf sedge occurs as an understory. Dominant forbs are prairie clovers, dotted gayfeather, fringed sagewort, winterfat, hairy goldaster, buckwheats, and lemon scurfpea. Other plants in the community are yucca and pricklypear cactus. Currant and skunkbush sumac are found in rock outcrop areas .	600	0.16	0.20
Blue Grama / Needleandthread	The dominant grasses include blue grama, and needleandthread. Little bluestem is present as a secondary grass. Significant forbs include phlox, sandwort, hairy goldaster, western ragweed, slimflower scurfpea, fringed sagewort and green sagewort. Other plants are yucca, broom snakeweed, and pricklypear cactus.	450	0.12	0.15
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include little bluestem, blue grama and needleandthread. Kentucky bluegrass has invaded. Cactus and sageworts are common. Noxious weeds such as Dalmatian toadflax, leafy spurge or Canada thistle may invade.	500	0.14	0.16
Blue Grama / Threadleaf Sedge	Blue grama and threadleaf sedge dominate the community. Little bluestem and sideoats grama may be remnants on steeper slopes. Cuman Ragweed, Hood's phlox, Hairy False Goldenaster, fringed sagebrush and small soapweed are common. Cushion plants such as mat loco and creeping nailwort are common.	350	0.10	0.12
Blue Grama Sod / Threadleaf Sedge / Threeawns / Bare Ground / Annuals	The dominant species are blue grama, threadleaf sedge, threeawn, and annual grasses. Mid-grasses are present a remnants. The dominant forbs are fringed sagewort, western ragweed, phlox, sandwort, buckwheat and green sagewort.	300	0.08	0.10
Broken Blue Grama Sod / Annuals	The dominant plant is blue grama. Yucca and cactus occur as secondary plants. Mid-grasses are non-existent in this plant community. Threadleaf sedge and annual grasses are present in the community.	300	0.08	0.10



FSD - Frequent and Severe Defoliation
HCPC - Historic Climax Plant Community
LTFSD - Long Term Frequent and Severe Defoliation
LTPG - Long-term Prescribed Grazing
NU, NF - No Use, No Fire
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)
VLTPG - Very Long-term Prescribed Grazing

Gravelly (15-17" Precipitation) – Little Bluestem / Needleandthread /Blue Grama Plant Community (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
<i>Warm Season Mid-Grasses</i>			180-270	30-45
Little Bluestem	Schizachyrium scoparium	SCSC	150-210	50-35
Sideoats Grama	Bouteloua curtipendula	BOCU	30-60	5-10
<i>Cool Season Bunch Grasses</i>			60-180	10-30
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	0-90	0-15
Needleandthread	Hesperostipa comata	HECO26	60-90	10-15
<i>Blue Grama</i>			60-90	10-15
Blue Grama	Bouteloua gracilis	BOGR2	60-90	10-15
<i>Wheatgrasses</i>			30-60	5-10
Streambank Wheatgrass	Elymus lanceolatus var. lanceolatus var. lanceolatus	ELLAL	30-60	5-10
Western Wheatgrass	Pascopyrum smithii	PASM	30-60	5-10
<i>Other Perennial Grasses</i>			30-60	5-10
Buffalograss	Bouteloua dactyloides	BODA2	0-30	0-5
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-30	0-5
Hairy Grama	Bouteloua hirsuta	BOHI2	0-30	0-5
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-30	0-5
Plains Reedgrass	Calamagrostis montanensis	CAMO	0-30	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-30	0-5
Prairie Sandreed	Calamovilfa longifolia	CALO	0-30	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-30	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-30	0-5
Threawn	Aristida sp.	ARIST	0-30	0-5
Other Perennial Grasses		2GP	0-30	0-5
GRASS-LIKES			30-60	
Sedge	Carex sp.	CAREX	0-30	0-5
Threadleaf Sedge	Carex filifolia	CAFI	30-60	
FORBS			90-120	
Beardtongue	Penstemon sp.	PENST	0-30	0-5
Buckwheat	Eriogonum sp.	ERIOG	0-30	0-5
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-30	0-5
Dotted Blazing Star	Liatris punctata	LIPU	0-30	0-5
Evening-primrose	Oenothera sp.	OENOT	0-30	0-5
Greenthread	Thelesperma sp.	THELE	0-30	0-5
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-30	0-5
Lemon Scurfpea	Psoralidium lanceolatum	PSLA3	0-30	0-5
Nailwort	Paronychia sp.	PARON	0-30	0-5
Phlox	Phlox sp.	PHLOX	0-30	0-5
Prairie Clover	Dalea sp.	DALEA	0-30	0-5
Prairie Sagewort	Artemisia frigida	ARFR4	0-30	0-5
Pussytoes	Antennaria sp.	ANTEN	0-30	0-5
Ragwort	Senecio sp.	SENEC	0-30	0-5
Sandwort	Arenaria sp.	ARENA	0-30	0-5
Scarlet Beeblossom	Gaura coccinea	GACO5	0-30	0-5
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-30	0-5
Other Perennial Forbs		2FP	0-30	0-5
SHRUBS			0-30	0-5
Brittle Cactus	Opuntia fragilis	OPFR	0-30	0-5
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-30	0-5
Plains Pricklypear	Opuntia polyacantha	OPPO	0-30	0-5
Small Soapweed	Yucca glauca	YUGL	0-30	0-5
Other Shrubs		2SHRUB	0-30	0-5

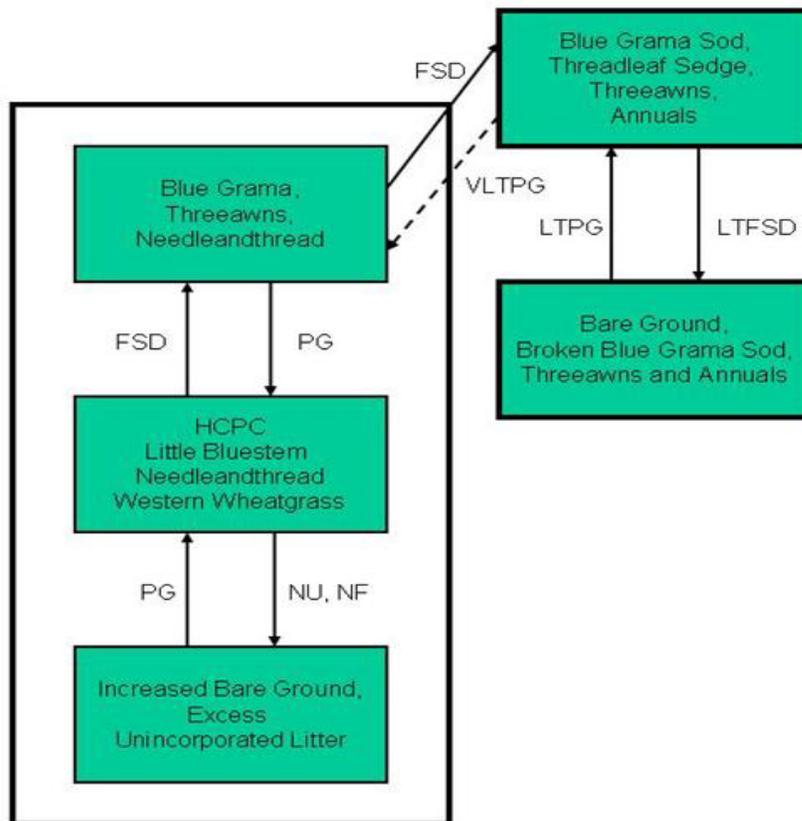
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	475	600	725

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: GRAVELLY LOAMY R067AY114WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on hills, ridges, terrace edges, and mountain slopes. The soils of this site are deep (greater than 40 inches) and well drained to excessively well drained. They formed in alluvium and colluvium from mixed rock.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Little Bluestem / Needleandthread / Western Wheatgrass	The potential vegetation is about 85-90% grasses, 5-15% forbs, and 0-5% woody plants. Mid-grasses dominate the community. The principal grasses are little bluestem, needleandthread and western wheatgrass. Secondary grasses are bluebunch wheatgrass, Indian ricegrass and blue grama. Threadleaf sedge occurs as an understory. Dominant forbs are prairie clovers, dotted gayfeather, scarlet globemallow, fringed sagewort, hairy goldaster and slimflower scurfpea. Other plants in the community are yucca and spreading buckwheat.	1100	0.30	0.36
Blue Grama / Threeawns / Needleandthread	The dominant grasses include blue grama, threeawn, and needleandthread. Little bluestem is a secondary grass in the community. Significant forbs include phlox, scarlet globemallow, slimflower scurfpea, hairy goldaster and western ragweed. Other plants are fringed sagewort, yucca and pricklypear cactus.	800	0.22	0.26
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include little bluestem, western wheatgrass and needleandthread. Noxious weeds have invaded site.	900	0.25	0.30
Bare Ground / Broken Blue Grama Sod / Threeawn / Annuals	The dominant grasses include blue grama, threadleaf sedge, threeawns, and annual grasses. Mid-grasses are still evident as remnant plants. The dominant forbs are western ragweed, phlox, broom snakeweed, buckwheat and green sagewort. Other plants are yucca, fringed sagewort and pricklypear cactus.	550	0.15	0.18



- FSD - Frequent and Severe Defoliation
- HCPC - Historic Climax Plant Community
- LTFSD - Long Term Frequent and Severe Defoliation
- PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)
- LTPG - Long-term Prescribed Grazing
- VLTPG - Very Long-term Prescribed Grazing
- NU, NF - No Use, No Fire

Gravelly Loamy (15-17" Precipitation) – Little Bluestem / Needleandthread / Western Wheatgrass (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Cool Season Bunch Grasses			440-495	40-45
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	0-110	0-10
Green Needlegrass	Nassella viridula	NAVI4	55-110	5-10
Indian Ricegrass	Achnatherum hymenoides	ACHY	55-110	5-10
Needleandthread	Hesperostipa comata	HECO26	330-385	30-35
Wheatgrasses			220-275	20-25
Streambank Wheatgrass	Elymus lanceolatus var. lanceolatus var. lanceolatus	ELLAL	0-55	0-5
Western Wheatgrass	Pascopyrum smithii	PASM	220-275	20-25
Blue Grama			55-110	5-10
Blue Grama	Bouteloua gracilis	BOGR2	55-110	5-10
Warm Season Mid-Grasses			110-220	10-20
Little Bluestem	Schizachyrium scoparium	SCSC	110-165	10-15
Sideoats Grama	Bouteloua curtipendula	BOCU	0-55	0-5
Other Perennial Grasses			55-110	5-10
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-55	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-55	0-5
Prairie Sandreed	Calamovilfa longifolia	CALO	0-55	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-55	0-5
Threeawn	Aristida sp.	ARIST	0-22	0-2
Other Perennial Grasses		2GP	0-55	0-5
GRASS-LIKES			0-55	0-5
Sedge	Carex sp.	CAREX	0-55	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-55	0-5
FORBS			165-220	15-20
Beardtongue	Penstemon sp.	PENST	0-22	0-2
Buckwheat	Eriogonum sp.	ERIOG	0-22	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-22	0-2
Common Yarrow	Achillea millefolium	ACMI2	0-22	0-2
Deathcamas	Zigadenus sp.	ZIGAD	0-22	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-22	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-22	0-2
Helianthella	Helianthella sp.	HELIA	0-22	0-2
Larkspur	Delphinium sp.	DELPH	0-22	0-2
Milkvetch	Astragalus sp.	ASTRA	0-22	0-2
Phlox	Phlox sp.	PHLOX	0-22	0-2
Prairie Clover	Dalea sp.	DALEA	0-22	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-22	0-2
Purple Locoweed	Oxytropis lambertii	OXLA3	0-22	0-2
Pussytoes	Antennaria sp.	ANTEN	0-22	0-2
Sandwort	Arenaria sp.	ARENA	0-22	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-22	0-2
Slimflower Scurfpea	Psoraleidium tenuiflorum	PSTE5	0-22	0-2
Other Perennial Forbs		2FP	0-55	0-5
SHRUBS			0-55	0-5
Plains Pricklypear	Opuntia polyacantha	OPPO	0-55	0-5
Spreading Buckwheat	Eriogonum effusum	ERER	0-55	0-5
Small Soapweed	Yucca glauca	YUGL	0-55	0-5
Other Shrubs		2SHRUB	0-55	0-5

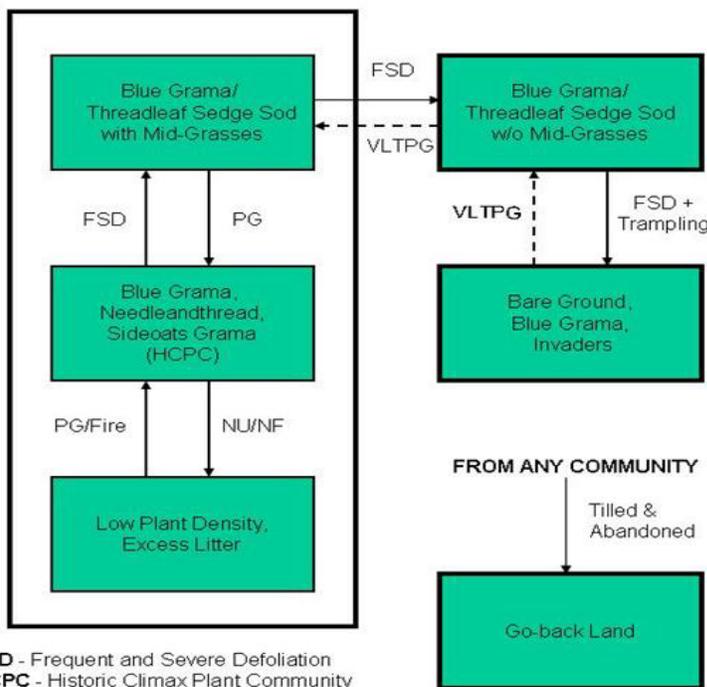
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	650	1100	1550

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: LIMY UPLAND R067AY120WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on very gently sloping to moderately steep uplands. The soils of this site are deep and well drained to somewhat excessively drained. These soils are moderately permeable and formed in calcareous loess.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Blue Grama / Needleandthread/ Sideoats Grama	The potential vegetation is about 75-95% grasses, 5-15% forbs, and 0-10% woody plants. The major grasses include blue grama, needleandthread, and sideoats grama. Other grasses and grass-likes include western wheatgrass, little bluestem, threadleaf sedge, and prairie junegrass. A variety of forbs and half-shrubs also occur.	1250	0.34	0.41
Blue Grama/Threadleaf Sedge Sod w/ Mid-Grasses	The plant community is made up of sod forming grasses with only remnants of cool-season mid-grasses remaining. The dominant grasses are blue grama and threadleaf sedge. Secondary grasses include Needleandthread and western wheatgrass. Sideoats grama and little bluestem are present as remnants. Other grasses present include Sandberg bluegrass and prairie junegrass. Significant forbs include scarlet globemallow, slim-flowered scurfpea, and skeleton plant.	950	0.26	0.31
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Needleandthread and sideoats grama are the dominant plants. Weedy species, cool-season grasses, and sedges are common. Annual bromes tend to invade the community. Cactus and sageworts may increase.	1000	0.27	0.33
Blue Grama/Threadleaf Sedge Sod	The dominant grass is blue grama. Other grasses and grass-likes include threadleaf sedge, and threeawns. The palatable forbs have been eliminated with only species such as scarlet globemallow, slim-flowered scurfpea, and skeleton plant remaining.	650	0.18	0.21
Blue Grama / Invaders	The dominant grasses and grass-likes include blue grama, threadleaf sedge, and threeawns. Annual grasses such as annual bromes and sixweeks fescue are common. The dominant perennial forbs include green sagewort, curlycup gumweed and hairy goldaster. Broom snakeweed is the most common shrub.	650	0.18	0.21
Go-back	The composition can include some remnant tame pasture grasses and a variety of pioneer perennial species. The dominant grasses include threeawn, sand dropseed, Sandberg bluegrass, annual bromes, and sixweeks fescue. Other grasses may include crested wheatgrass, little bluestem, western wheatgrass, and needleandthread. Pricklypear cactus is typically absent.	650	0.18	0.21



FSD - Frequent and Severe Defoliation
HCPC - Historic Climax Plant Community
LTPG - Long-term Prescribed Grazing
NU/NF - No Use and No Fire
PG - Prescribed Grazing
VLTPG - Very Long-term Prescribed Grazing

Limy Upland (15-17" Precipitation) – Blue Grama / Needleandthread/ Sideoats Grama Plant Community (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
<i>Cool Season Mid-Grasses</i>			188-375	15-30
Needleandthread	Hesperostipa comata	HECO26	125-250	10-20
Western Wheatgrass	Pascopyrum smithii	PASM	63-125	5-10
<i>Warm Season Mid-Grasses</i>			188-375	5-30
Little Bluestem	Schizachyrium scoparium	SCSC	63-188	5-15
Sideoats Grama	Bouteloua curtipendula	BOCU	125-188	10-15
Blue Grama			250-313	20-25
Blue Grama	Bouteloua gracilis	BOGR2	250-313	20-25
<i>Other Perennial Grasses</i>			63-188	5-15
Buffalograss	Bouteloua dactyloides	BODA2	0-63	0-5
Green Needlegrass	Nassella viridula	NAVI4	0-63	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-63	0-5
Prairie Sandreed	Calamovilfa longifolia	CALO	0-63	0-5
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-63	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-63	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-63	0-5
Threeawn	Aristida sp.	ARIST	0-25	0-2
Other Perennial Grasses		2GP	0-63	0-5
GRASS-LIKES			125-188	10-15
Sedge	Carex sp.	CAREX	0-63	0-5
Threadleaf Sedge	Carex filifolia	CAFI	125-188	10-15
FORBS			63-188	5-15
American Vetch	Vicia americana	VIAM	0-25	0-2
Beardtongue	Penstemon sp.	PENST	0-25	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-25	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-25	0-2
Indian Breadroot	Pediomelum sp.	PEDIO2	0-25	0-2
Ironweed	Vernonia sp.	VERNO	0-25	0-2
Milkvetch	Astragalus sp.	ASTRA	0-25	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-25	0-2
Rush Skeletonplant	Lygodesmia juncea	LYJU	0-25	0-2
Scarlet Beeblossom	Gaura coccinea	GACO5	0-25	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-25	0-2
Scurfpea	Psoraleidum sp.	PSORA2	0-25	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-25	0-2
Violet Prairie Clover	Dalea purpurea var. purpurea	DAPU5	0-25	0-2
White Prairie Clover	Dalea candida	DACA7	0-25	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-25	0-2
Other Perennial Forbs		2FP	0-63	0-5
SHRUBS			0-125	0-10
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-25	0-2
Plains Prickly pear	Opuntia polycantha	OPPO	0-25	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-25	0-2
Small Soapweed	Yucca glauca	YUGL	0-63	0-5
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-25	0-2
Winterfat	Krascheninnikovia lanata	KRLA2	0-63	0-5
Other Shrubs		2SHRUB	0-63	0-5

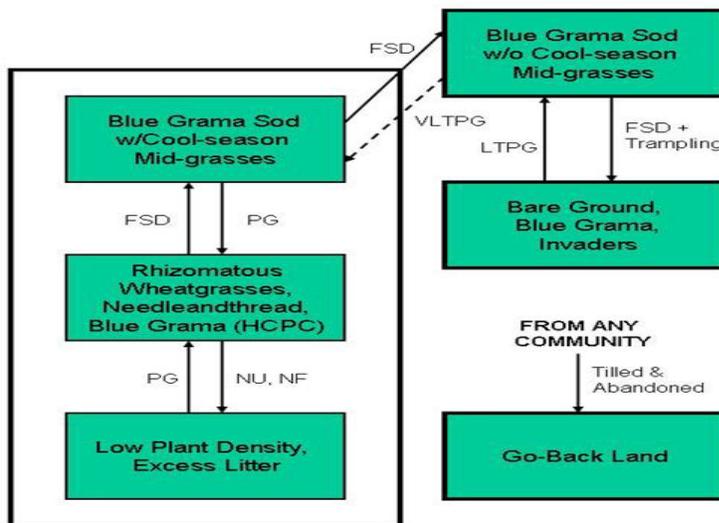
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	750	1250	1750

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations.
 *RV = Representative Value.

SITE: LOAMY R067AY122WY 15-17" precipitation

SITE DESCRIPTION: This site will usually occur in upland positions on nearly level to moderately sloping land on hills, alluvial fans and ridges. The soils of this site are very deep to moderately deep (greater than 20" to bedrock), well drained and moderately permeable. Layers of the soil most influential to the plant community varies from 3-10 inches. These layers consist of the A horizon with very fine sandy loam, loam or silt loam texture and may also include the upper few inches of the B horizon with clay loam texture.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Rhizomatous Wheatgrasses / Needleandthread / Blue Grama	The potential vegetation is about 75-90% grasses, 5-15% forbs, and 5-10% woody plants. The major grasses include rhizomatous wheatgrasses (predominantly western with some thickspike), needleandthread, and blue grama. Other grasses include green needlegrass, little bluestem, prairie junegrass, and Sandberg bluegrass. A variety of forbs and half-shrubs also occur.	1500	0.41	0.49
Blue Grama Sod / Cool-Season Mid-Grasses	The dominant grasses are blue grama and western wheatgrass. Needleandthread is reduced. Green needlegrass and little bluestem are nearly absent. Other grasses present include Sandberg bluegrass and prairie junegrass. Significant forbs include scarlet globemallow, wild onion, death camas, slim-flowered scurfpea, and skeletonweed.	1100	0.30	0.36
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Dominant grasses include little bluestem, western wheatgrass and needleandthread. Cactus and sagewort are common. Noxious weeds such as Dalmatian toadflax, leafy spurge, or Canada thistle may invade.	1400	0.38	0.46
Blue Grama Sod	The plant community is a dense sod, made up of primarily warm-season grasses. The cool-season mid-grasses have been eliminated. The dominant grass is blue grama. Other grasses include threadleaf sedge, buffalograss, and threeawns. Common forbs include scarlet globemallow, wild onion, death camas, slim-flowered scurfpea, and skeletonweed.	700	0.19	0.23
Bare Ground / Blue Grama / Invaders	The plant composition is made up annuals with a few species of perennial forbs and grasses that are very tolerant to frequent and severe defoliation. The dominant grasses include threeawns, blue grama, buffalograss, and threadleaf sedge. Annual grasses such as cheatgrass and sixweeks fescue have increased. The dominant perennial forbs include curlycup gumweed and hairy goldaster. Broom snakeweed, pricklypear cactus, and green sagewort are common.	700	0.19	0.23
Go back	The composition can include some remnant tame pasture grasses and a variety of pioneer perennial species. The dominant grasses include threeawn, sand dropseed, Sandberg bluegrass, cheatgrass, and sixweeks fescue. Other grasses may include crested wheatgrass, western wheatgrass, and needleandthread. Blue grama is typically absent. Forbs can include western sticktight, western ragweed, and sweet clover. Significant shrubs in this community include broom snakeweed and green rabbitbush.	700	0.19	0.23



FSD - Frequent and Severe Defoliation of the Cool-season Mid-grasses.
HCPC - Historic Climax Plant Community
LTPG - Long-term Prescribed Grazing.
NU, NF - No Use, No Fire.
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season).
VLTPG - Very Long-term Prescribed Grazing (could take generations)

Loamy (15-17" Precipitation) -- Rhizomatous Wheatgrasses / Needleandthread / Blue Grama (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition		
GRASSES & GRASS-LIKES						
Needlegrasses			450-600	30-40		
Green Needlegrass	Nassella viridula	NAVI4	75-150	5-10		
Needleandthread	Hesperostipa comata	HECO26	375-450	25-30		
Wheatgrasses			300-375	20-25		
Streambank Wheatgrass	Elymus lanceolatus var. lanceolatus	ELLAL	0-150	0-10		
Western Wheatgrass	Pascopyrum smithii	PASM	300-375	20-25		
Blue Grama			150-225	10-15		
Blue Grama	Bouteloua gracilis	BOGR2	150-225	10-15		
Little Bluestem			75-150	5-10		
Little Bluestem	Schizachyrium scoparium	SCSC	75-150	5-10		
Other Perennial Grasses & Grass-Likes			150-225	10-15		
Buffalograss	Bouteloua dactyloides	BODA2	0-75	0-5		
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-75	0-5		
Prairie Junegrass	Koeleria macrantha	KOMA	0-75	0-5		
Sandberg Bluegrass	Poa secunda	POSE	0-75	0-5		
Sideoats Grama	Bouteloua curtipendula	BOCU	0-75	0-5		
Threadleaf Sedge	Carex filifolia	CAFI	0-75	0-5		
Threeawn	Aristida sp.	ARIST	0-30	0-2		
Other Graminoids		2GRAM	0-75	0-5		
FORBS			75-225	5-15		
American Vetch	Vicia americana	VIAM	0-30	0-2		
Beardtongue	Penstemon sp.	PENST	0-30	0-2		
Black Samson Echinacea	Echinacea angustifolia	ECAN2	0-30	0-2		
Buckwheat	Eriogonum sp.	ERIOG	0-30	0-2		
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-30	0-2		
Desert Parsley	Lomatium sp.	LOMAT	0-30	0-2		
Dotted Blazing Star	Liatris punctata	LIPU	0-30	0-2		
Field Sagewort	Artemisia campestris	ARCA12	0-30	0-2		
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-30	0-2		
Indian Breadroot	Pediomelum sp.	PEDIO2	0-30	0-2		
Larkspur	Delphinium sp.	DELPH	0-30	0-2		
Meadow Deathcamas	Zigadenus venenosus	ZIVE	0-30	0-2		
Milkvetch	Astragalus sp.	ASTRA	0-30	0-2		
Prairie Sagewort	Artemisia frigida	ARFR4	0-30	0-2		
Sanddune Wallflower	Erysimum capitatum	ERCA14	0-30	0-2		
Scarlet Beeblossom	Gaura coccinea	GACO5	0-30	0-2		
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-30	0-2		
Scurfpea	Psoraleidum sp.	PSORA2	0-30	0-2		
Textile Onion	Allium textile	ALTE	0-30	0-2		
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-30	0-2		
Violet Prairie Clover	Dalea purpurea	DAPU5	0-30	0-2		
White Prairie Clover	Dalea candida	DACA7	0-30	0-2		
White Sagebrush	Artemisia ludoviciana	ARLU	0-30	0-2		
Other Perennial Forbs		2FP	0-75	0-5		
SHRUBS			75-150			
Big Sagebrush	Artemisia tridentata	ARTR2	0-75	0-5		
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-30	0-2		
Fourwing Saltbush	Atriplex canescens	ATCA2	0-30	0-2		
Plains Prickly pear	Opuntia polyacantha	OPPO	0-30	0-2		
Prairie Rose	Rosa arkansana	ROAR3	0-30	0-2		
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-30	0-2		
Yellow Rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	0-30	0-2		
Winterfat	Krascheninnikovia lanata	KRLA2	0-75	0-5		
Other Shrubs		2SHRUB	0-75	0-5		
			Annual Production lbs./acre	LOW	RV*	HIGH
			TOTAL	1000	1500	2000

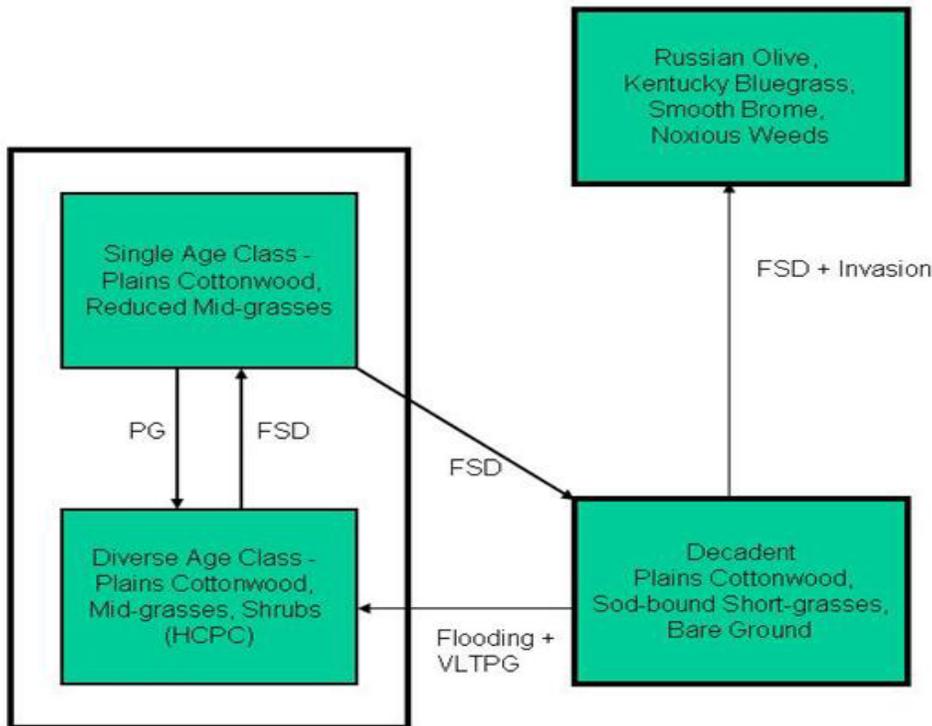
*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations.

*RV = Representative Value.

SITE: LOAMY LOWLAND R067AY124WY

SITE DESCRIPTION: This site occurs on nearly level areas that receive additional water from overflow of intermittent streams or runoff from adjacent slopes and have a water table within reach of trees (within 20 feet). The soils of this site are deep to very deep well-drained soils formed in mixed alluvium. Layers of soil most influential to the plant community vary from 3 to 6 inches thick. These soils have moderate permeability.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Diverse Age Class / Plains Cottonwood / Mid-grasses, Shrubs	The potential vegetation is about 65-85% grasses, 5-10% forbs, and 5-10% shrubs. The site is highly variable with a diverse mix of mid to tall grasses, forbs, shrubs and trees. Trees can make up 5-15% of the total annual production. This can equate to 10-30% canopy cover. The major grasses include western wheatgrass, needleandthread, blue grama, green needlegrass, little bluestem, and big bluestem. Various species of shrubs and trees typically occur due to the water table within reach of the woody plants. These can include species such as roses, silver sagebrush, western snowberry, plains cottonwood, box elder, and green ash.	2500	0.69	0.82
Single Age Class / Plains Cottonwood / Reduced Mid-grasses	The dominant grasses are blue grama and western wheatgrass. Green needlegrass, little bluestem, and big bluestem are present only as remnants. No new tree seedlings occur.	1750	0.48	0.58
Decadent Plains Cottonwood / Sod-bound Short-grasses /Bare Ground	The dominant grass is blue grama. Other grasses include threadleaf sedge, buffalograss, and three awns. Remaining trees are beginning to die.	1250	0.34	0.41
Russian Olive / Kentucky bluegrass / Smooth Brome / Noxious Weeds	The dominant grasses typically include Kentucky bluegrass, smooth brome, threeawn, blue grama, buffalograss, and threadleaf sedge. Annual grasses such as cheatgrass and sixweeks fescue have invaded. The dominant perennial forbs include curlycup gumweed and hairy goldaster. Major shrubs include broom snakeweed, pricklypear cactus, and green sagewort.	900	0.25	0.30



FSD - Frequent and Severe Defoliation.
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season).
VLTPG - Very Long-term Prescribed Grazing (could take generations)

Loamy Lowland – Diverse Age Class / Plains Cottonwood / Mid-grasses, Shrubs (HCPC)

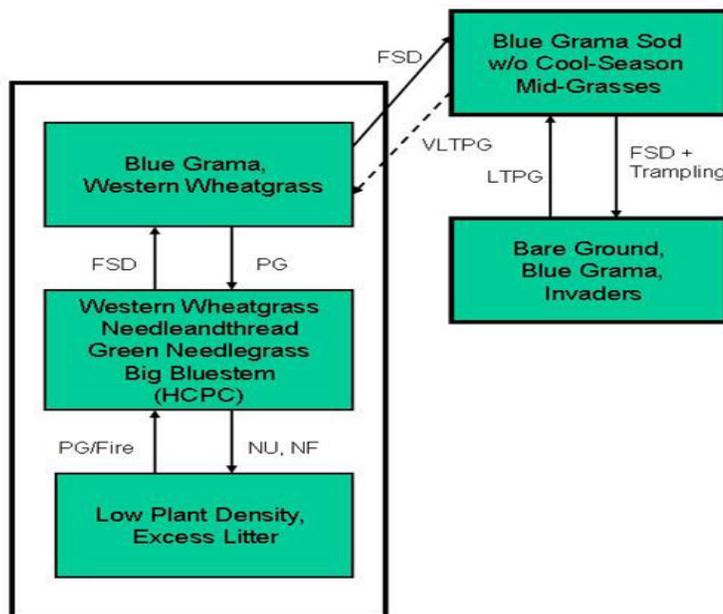
COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition		
GRASSES & GRASS-LIKES						
Needlegrasses			625-750	25-30		
Green Needlegrass	Nassella viridula	NAVI4	125-250	5-10		
Needleandthread	Hesperostipa comata	HECO26	500-625	20-25		
Wheatgrasses			625-750	25-30		
Streambank Wheatgrass	Elymus lanceolatus var. lanceolatus spp. Lanceolatus	ELLAL	125-250	5-10		
Western Wheatgrass	Pascopyrum smithii	PASM	625-750	25-30		
Blue Grama			250-375	10-15		
Blue Grama	Bouteloua gracilis	BOGR2	250-375	10-15		
Bluestems			250-375	10-15		
Big Bluestem	Andropogon gerardii	ANAGE	125-250	5-10		
Little Bluestem	Schizachyrium scoparium	SCSC	125-250	5-10		
Other Perennial Grasses & Grass-likes			375-500	15-20		
Buffalograss	Bouteloua dactyloides	BODA2	0-125	0-5		
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-125	0-5		
Prairie Junegrass	Koeleria macrantha	KOMA	0-125	0-5		
Sandberg Bluegrass	Poa secunda	POSE	0-125	0-5		
Sideoats Grama	Bouteloua curtipendula	BOCU	0-125	0-5		
Threadleaf Sedge	Carex filifolia	CAFI	0-125	0-5		
Threeawn	Aristida sp.	ARIST	0-125	0-5		
Other Graminoids		2GRAM	0-125	0-5		
FORBS			125-250	5-10		
American Vetch	Vicia americana	VIAM	0-125	0-5		
Beardtongue	Penstemon sp.	PENST	0-125	0-5		
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-125	0-5		
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-125	0-5		
Milkvetch	Astragalus sp.	ASTRA	0-125	0-5		
Prairie Sagewort	Artemisia frigida	ARFR4	0-125	0-5		
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-125	0-5		
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-125	0-5		
White Sagebrush	Artemisia ludoviciana	ARLU	0-125	0-5		
Other Perennial Forbs		2FP	0-125	0-5		
SHRUBS			125-250	5-10		
Rose	Rosa sp.	ROSA	0-125	0-5		
Silver Sagebrush	Artemisia cana	ARCA13	0-125	0-5		
Western Snowberry	Symphoricarpos occidentalis	SYOC	0-125	0-5		
Other Shrubs		2SHRUB	0-125	0-5		
TREES			125-375	5-15		
Boxelder	Acer negundo	ACNE2	0-125	0-5		
Green Ash	Fraxinus pennsylvanica	FRPE	0-125	0-5		
Plains Cottonwood	Populus deltoides ssp. monilifera	PODEM	0-125	0-5		
			Annual Production lbs./acre	LOW	RV*	HIGH
			TOTAL	2000	2500	3000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations.
 *RV = Representative Value.

SITE: LOAMY OVERFLOW R067AY126WY

SITE DESCRIPTION: This site occurs on nearly level areas that receive additional water from overflow of intermittent streams or runoff from adjacent slopes on alluvial fans and stream terraces. The soils of this site are deep to very deep well-drained soils formed in mixed alluvium. These soils have moderate permeability. Layers of soil most influential to the plant community vary from 3 to 6 inches thick. These soils have moderate permeability.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Western Wheatgrass / Needleandthread / Green Needlegrass / Big Bluestem	The potential vegetation is about 80-95% grasses, 5-10% forbs, and 0-10% woody plants. The community is dominated by cool season mid-grasses. The major grasses include western wheatgrass, needleandthread, green needlegrass, and big bluestem. Blue grama, little bluestem, and numerous other grasses are typically present. A variety of forbs and half-shrubs can also occur. Shrubs are not abundant. Plant diversity is high.	2000	0.55	0.66
Blue Grama / Western Wheatgrass	The dominant grasses are blue grama and western wheatgrass. Needleandthread is present in small amounts. Big bluestem, green needlegrass, little bluestem, and palatable forbs are only present as remnants. Other grasses present may include buffalograss and prairie junegrass. Forbs present may include scarlet globemallow and hairy goldaster.	1500	0.41	0.49
Excessive Litter	Litter amounts are excessive. Bunch grasses often develop dead centers, and rhizomatous grasses form small colonies because of a lack of tiller stimulation. Western wheatgrass, Needleandthread, Green Needlegrass and big bluestem are present but in low vigor. In advanced stages, weedy species and cool-season grasses will dominate. Noxious weeds such as Dalmatian toadflax, leafy spurge, or Canada thistle may begin to invade if a seed source is present. Plant diversity is moderate to high.	1800	0.49	0.59
Blue Grama Sod	The dominant grass/grasslikes are typically blue grama and threadleaf sedge. Other grasses include buffalograss and threeawns. Kentucky bluegrass can invade and become dominant. It typically can contribute to the sodbound condition. Common forbs include scarlet globemallow, curlycup gumweed, and hairy goldaster.	1000	0.27	0.33
Bare Ground / Blue Grama / Invaders	The plant composition is made up of annuals with a few species of perennial forbs and grasses that are very tolerant to frequent and severe defoliation. The dominant grasses include three awns, blue grama, and buffalograss. Annuals such as kochia and cheatgrass have invaded.	1000	0.27	0.33



FSD - Frequent and Severe Defoliation of the Cool-season Mid-grasses
HCPC - Historic Climax Plant Community
LTPG - Long-term Prescribed Grazing
NU, NF - No Use, No Fire
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)
VLTPG - Very Long-term Prescribed Grazing (could take generations)

Loamy Overflow – Western Wheatgrass / Needleandthread / Green Needlegrass / Big Bluestem (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
<i>Cool Season Grasses</i>			1300-1400	65-70
Green Needlegrass	Nassella viridula	NAVI4	100-300	5-15
Needleandthread	Hesperostipa comata	HECO26	200-300	10-15
Western Wheatgrass	Pascopyrum smithii	PASM	700-800	35-40
Bluestems			300-500	15-25
Big Bluestem	Andropogon gerardii	ANAGE	200-300	10-15
Little Bluestem	Schizachyrium scoparium	SCSC	100-200	5-10
Blue Grama			100-200	5-10
Blue Grama	Bouteloua gracilis	BOGR2	100-200	5-10
Other Perennial Grasses & Grass-Likes			300-400	15-20
Basin Wildrye	Leymus cinereus	LECI4	0-100	0-5
Buffalograss	Bouteloua dactyloides	BODA2	0-100	0-5
Canada Wildrye	Elymus canadensis	ELCA4	0-100	0-5
Indiangrass	Sorghastrum nutans	SONU2	0-100	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-100	0-5
Prairie Sandreed	Calamovilfa longifolia	CALO	0-100	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-100	0-5
Sideoats Grama	Bouteloua curtipendula	BOCU	0-100	0-5
Slender Wheatgrass	Elymus trachycaulus	ELTR7	0-100	0-5
Switchgrass	Panicum virgatum	PAVI2	0-100	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-100	0-5
Threawn	Aristida sp.	ARIST	0-40	0-2
Other Perennial Grasses		2GP	0-100	0-5
FORBS			100-200	5-10
American Vetch	Vicia americana	VIAM	0-40	0-2
Beardtongue	Penstemon sp.	PENST	0-40	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-40	0-2
Desert Parsley	Lomatium sp.	LOMAT	0-40	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-40	0-2
Field Sagewort	Artemisia campestris	ARCA12	0-40	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-40	0-2
Indian Breadroot	Pediomelum sp.	PEDIO2	0-40	0-2
Larkspur	Delphinium sp.	DELPH	0-40	0-2
Meadow Deathcamas	Zigadenus venenosus	ZIVE	0-40	0-2
Milkvetch	Astragalus sp.	ASTRA	0-40	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-100	0-5
Scarlet Beeblossom	Gaura coccinea	GACO5	0-40	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-40	0-2
Scurfpea	Psoraleum sp.	PSORA2	0-40	0-2
Textile Onion	Allium textile	ALTE	0-40	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-40	0-2
Violet Prairie Clover	Dalea purpurea	DAPU5	0-40	0-2
White Prairie Clover	Dalea candida	DACA7	0-40	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-40	0-2
Other Perennial Forbs		2FP	0-100	0-5
SHRUBS			0-200	0-10
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-40	0-2
Fourwing Saltbush	Atriplex canescens	ATCA2	0-100	0-5
Leadplant	Amorpha canescens	AMCA6	0-40	0-2
Plains Prickly pear	Opuntia polyacantha	OPPO	0-40	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-40	0-2
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-40	0-2
Silver Sagebrush	Artemisia cana	ARCA13	0-200	0-10
Yellow Rabbitbrush	Chrysothamnus viscidiflorus	CHVI8	0-40	0-2
Winterfat	Krascheninnikovia lanata	KRLA2	0-40	0-2
Other Shrubs		2SHRUB	0-100	0-5

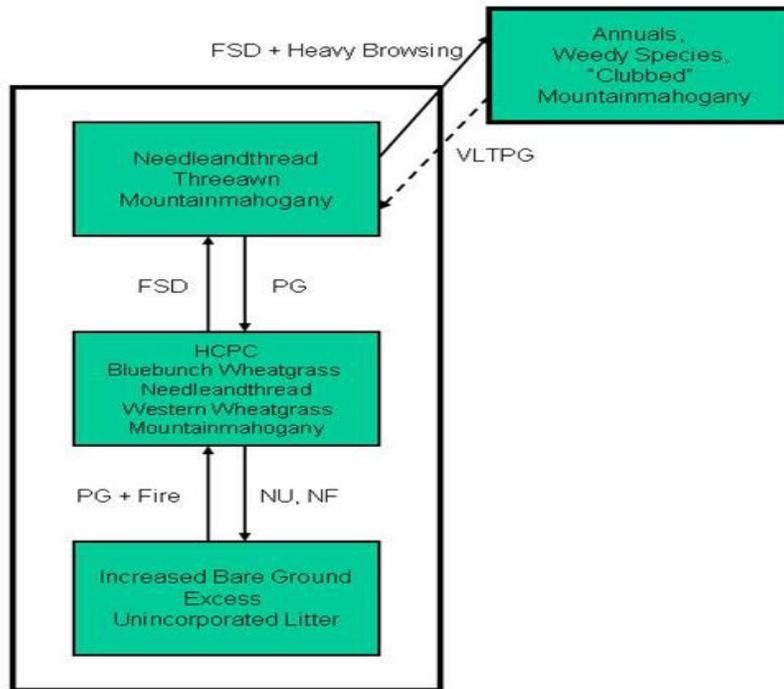
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	1000	2000	3000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: ROCKY HILLS R067AY134WY

SITE DESCRIPTION: This site occurs on nearly level to steeply sloping uplands on alluvial fans and hills. The soils of this site are shallow to very deep and well drained. They formed on alluvium, colluvium and residuum and have moderate permeability.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Bluebunch Wheatgrass / Needleandthread / Western Wheatgrass / Mountain mahogany	The potential vegetation is about 45-55% grasses, 5-10% forbs, and 45-55% woody plants. Mid-grasses and woody plants co-dominate the site. The principal grasses are bluebunch wheatgrass, needleandthread and western wheatgrass. Secondary grasses are little bluestem, Indian ricegrass and side-oats grama. Dominant forbs are prairie clovers, dotted gayfeather, scarlet globemallow, hairy goldaster and slimflower scurfpea. Other plants in the community are winterfat and fringed sagewort	800	0.22	0.26
Needleandthread / Threawn / Mountain mahogany	The dominant grasses include needleandthread and Fendler's threawn. Secondary grasses and grass-likes include threadleaf sedge, blue grama and bluebunch wheatgrass. Significant forbs include phlox, scarlet globemallow, slimflower scurfpea, hairy goldaster and western ragweed. Dominant shrubs are mountain mahogany and Juniper. Other plants are fringed sagewort and pricklypear cactus.	650	0.18	0.21
Excessive Litter	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. The dominant grasses/grasslikes include needleandthread, Fendler's threawn and western wheatgrass. Little bluestem, bluebunch wheatgrass, side-oats grama are present in secondary amounts. Noxious weeds have started to invade.	700	0.19	0.23
Annuals / Weeds/ Clubbed Mountain Mahogany	The dominant species include mountain mahogany, annual grasses, annual forbs and other weedy species. Noxious weeds are common. Mid-grasses are present only as remnants. The dominant forbs are western ragweed, phlox, broom snakeweed and green sagewort. Other plants are yucca, fringed sagewort and pricklypear cactus.	400	0.11	0.13



FSD - Frequent and Severe Defoliation
HCPC - Historic Climax Plant Community
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season).
VLTGP - Very Long-term Prescribed Grazing
NU, NF - No Use, No Fire.

Rocky Hills -- Bluebunch Wheatgrass / Needleandthread / Western Wheatgrass /Mountain mahogany (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Little Bluestem			40-80	5-10
Little Bluestem	Schizachyrium scoparium	SCSC	40-80	5-10
Cool Season Bunch Grasses			120-240	15-30
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	80-160	10-20
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-40	0-5
Needleandthread	Hesperostipa comata	HECO26	80-160	10-20
Gramas			48-80	5-10
Blue Grama	Bouteloua gracilis	BOGR2	40-80	5-10
Sideoats Grama	Bouteloua curtipendula	BOCU	0-40	0-5
Wheatgrasses			80-160	10-20
Streambank Wheatgrass	Elymus lanceolatus var. lanceolatus	ELLAL	80-160	10-20
Western Wheatgrass	Pascopyrum smithii	PASM	80-160	10-20
Other Perennial Grasses			80-160	10-20
Fendler Threewain	Aristida purpurea var longiseta	ARPU9	0-40	0-5
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-40	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-40	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-40	0-5
Other Perennial Grasses		2GP	0-40	0-5
Grass-likes			0-40	0-5
Sedges	Carex sp.	CAREX	0-40	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-40	0-5
FORBS			40-80	5-10
Beardtongue	Penstemon sp.	PENST	0-16	0-2
Buckwheat	Eriogonum sp.	ERIOG	0-16	0-2
Common Yarrow	Achillea millefolium	ACMI2	0-40	0-5
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-16	0-2
Deathcamas	Zigadenus sp.	ZIGAD	0-40	0-5
Dotted Blazing Star	Liatris punctata	LIPU	0-16	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-16	0-2
Helianthella	Helianthella sp.	HELIA	0-16	0-2
Larkspur	Delphinium sp.	DELPH	0-40	0-5
Milkvetch	Astragalus sp.	ASTRA	0-40	0-5
Phlox	Phlox sp.	PHLOX	0-16	0-2
Prairie Clover	Dalea sp.	DALEA	0-16	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-40	0-5
Purple Locoweed	Oxytropis lambertii	OXLA3	0-40	0-5
Pussytoes	Antennaria sp.	ANTEN	0-16	0-2
Sandwort	Arenaria sp.	ARENA	0-16	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-16	0-2
Slimflower Scurfpea	Psoraleidium tenuiflorum	PSTE5	0-40	0-5
Other Perennial Forbs		2FP	0-40	0-5
SHRUBS			200-320	25-40
Alder Leaf Mountain Mahogany	Cercocarpus montanus	CEMO2	200-320	25-40
Winterfat	Krascheninnikovia lanata	KRLA2	0-40	0-5
Other Shrubs		2SHRUB	0-40	0-5
TREES			40-80	5-10
Rocky Mountain Juniper	Juniperus scopulorum	JUSC2	40-80	5-10

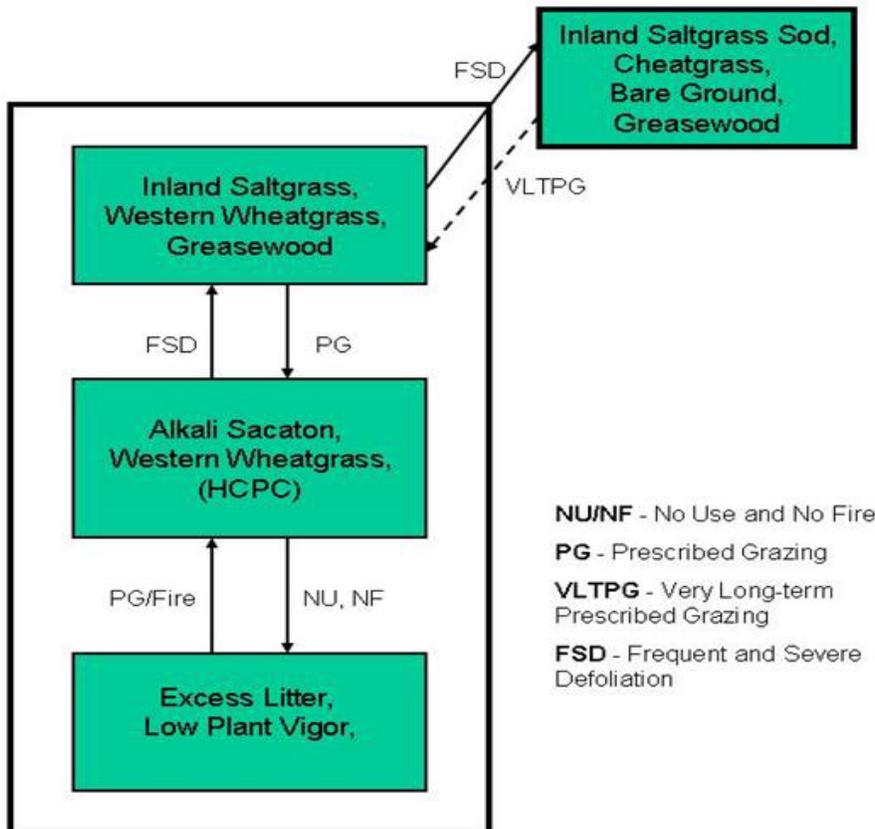
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	450	800	1100

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SALINE LOWLAND R067AY138WY 12-14" precipitation

SITE DESCRIPTION: This site normally occurs on land that receives overflow from intermittent streams or runoff from adjacent slopes. It is found on alluvial fans, drainageways, and stream terraces. The soils of this site are deep and very deep well-drained soils formed in alluvium. Permeability is moderate to slow. Soils are moderately to strongly saline and/or alkaline. Higher soluble salt concentrations may be found in the subsoil. The surface soil will be highly variable and vary from 2 to 8 inches in thickness. The surface texture ranges from very fine sandy loam, fine sandy loam, sandy loam, loam, silt loam, clay loam, clay, or silty clay. A fluctuating water table occurs in these areas and ranges from 1 to 5 feet. These areas are subject to occasional overflow.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Alkali Sacaton / Western Wheatgrass	The potential vegetation is about 75-90% grasses, 0-20% woody plants, and 0-5% forbs. Plant composition (based on total annual production) is approximately 35-55% warm season grasses, with the remainder made up of cool season grasses and sedges. Only about 5% is made up of forbs. Shrubs can be present up to 20%. The principal grasses are alkali sacaton, western wheatgrass, and inland saltgrass. Greasewood is the most commonly occurring shrub and is characteristic of this site.	1500	0.41	0.49
Inland Saltgrass / Western Wheatgrass / Greasewood	The dominant grasses include inland saltgrass and western wheatgrass. Remnant amounts of alkali sacaton are still present in scattered clumps. The greasewood plants are becoming more vigorous and the amount of new seedlings may be increasing if not exposed to severe browsing.	1300	0.36	0.43
Excessive Litter	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. The dominant grasses/grasslikes include western wheatgrass and inland saltgrass.	1200	0.33	0.39
Inland Saltgrass Sod / Cheatgrass / Greasewood	Inland saltgrass sod dominates this plant community. The sod can become broken with invasion of plants such as broom snakeweed, cheatgrass, and sixweeks fescue. Other grasses can include blue grama, Kentucky bluegrass, and three awns. Only a few, weedy forbs occur. Greasewood can dominate this site.	900	0.25	0.30



Saline Lowland (12-14" Precipita

tion) —Alkali Sacaton / Western Wheatgrass (HCPC)

COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES AND GRASSLIKES				
Alkali Sacaton			375-450	25-30
Alkali Sacaton	Sporobolus airoides	SPAI	375-450	25-30
Western Wheatgrass			225-300	15-30
Western Wheatgrass	Pascopyrum smithii	PASM	225-300	15-20
Inland Saltgrass			150-225	10-15
Inland Saltgrass	Distichlis spicata	DISP	150-225	10-15
Other Perennial Grasses			375-525	25-35
Alkali cordgrass	Spartina gracilis	SPGR	0-75	0-5
Blue Grama	Bouteloua gracilis	BOGR2	0-75	0-5
Canada Wildrye	Elymus canadensis	ELCA4	0-75	0-5
Bluegrass	Poa sp.	POA	0-75	0-5
Nuttall's alkaligrass	Puccinellia nuttalliana	PUNU2	0-75	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-75	0-5
Sedge	Carex sp.	CAREX	0-75	0-5
Slender Wheatgrass	Elymus trachycaulus	ELTR7	0-75	0-5
Switchgrass	Panicum virgatum	PAVI2	0-75	0-5
Other Perennial Grasses		2GP	0-75	0-5
FORBS			15-75	1-5
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-30	0-2
Milkvetch	Astragalus sp.	ASTRA	0-30	0-2
Rush Skeletonplant	Lygodesmia juncea	LYJU	0-30	0-2
Scarlet Beeblossom	Gaura coccinea	GACO5	0-30	0-2
White Heath Aster	Symphyotrichum ericoides var. ericoides	SYERE	0-30	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-30	0-2
Other Perennial Forbs		2FP	15-75	1-5
SHRUBS			15-300	1-20
Fourwing Saltbush	Atriplex canescens	ATCA2	0-75	0-5
Greasewood	Sarcobatus vermiculatus	SAVE4	15-300	1-20
Rubber Rabbitbrush	Ericameria nauseosa	ERNA10	0-75	0-5
Silver Buffaloberry	Shepherdia argentea	SHAR	0-75	0-5
Other Shrubs		2SHRUB	15-75	1-5

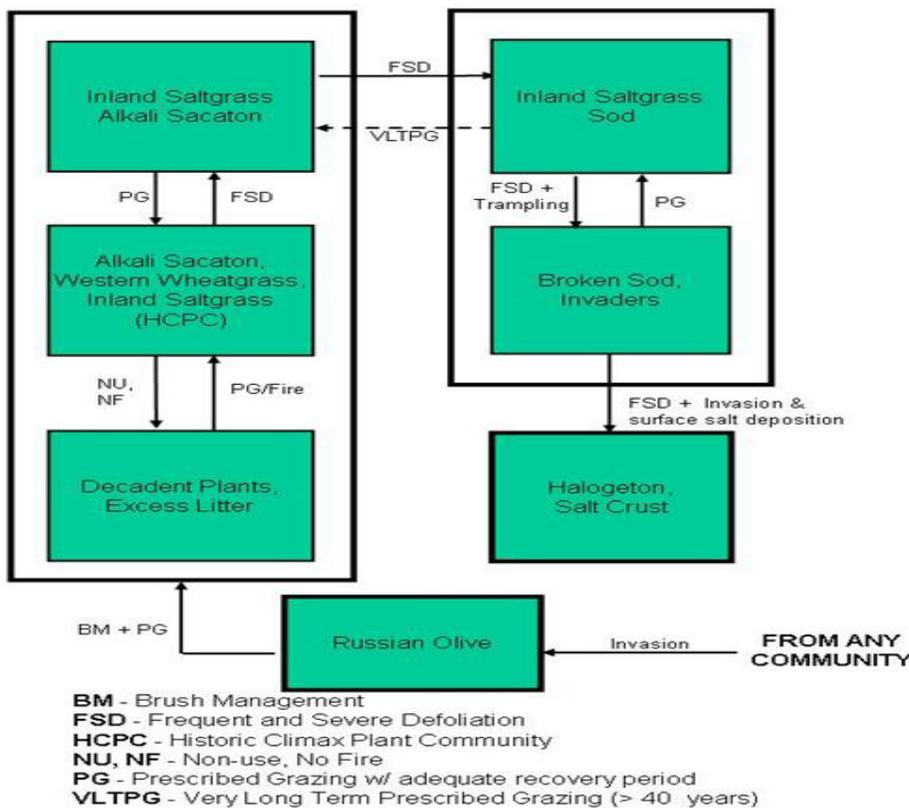
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	1100	1500	1900

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SALINE SUBIRRIGATED R67AY142WY 15-17" precipitation

SITE DESCRIPTION: This site occurs on nearly level bottomlands and alluvial fans adjacent to streams, springs and ponds. The soils of this site have a strong saline and/or alkaline water table within the reach of plant species (12-40") during most of the growing season. Salt crusts are commonly found on ridges and mounds during dry periods. Moisture is not usually the factor limiting plant production. Layers of soil most influential to the plant community varies from 3 to 6 inches thick.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Alkali Sacaton / Western Wheatgrass / Inland Saltgrass	The potential vegetation is about 90% grasses, 5-10% forbs, and 0-5% woody plants. The principle dominant plants are alkali sacaton, western wheatgrass, and inland saltgrass. Grasses of secondary importance are alkali cordgrass and slender wheatgrass. Bluegrasses, sedges and rushes occur as an understory.	3500	0.96	1.15
Inland Saltgrass / Alkali Sacaton	Inland saltgrass is the primary grass; alkali sacaton is of secondary importance. Other grasses include western wheatgrass, and slender wheatgrass.	2300	0.63	0.76
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. The dominant grasses/grasslikes include alkali sacaton, western wheatgrass and inland saltgrass. As litter accumulates, bluegrasses increase and annual grasses invade.	3100	0.85	1.02
Inland Saltgrass Sod	Inland saltgrass dominates the community and has developed into a sod-bound condition. Alkali sacaton is present only as a few remnant plants remaining. Forbs such as kochia and Russian thistle are common.	1900	0.52	0.63
Broken Sod / Invaders	Inland saltgrass still dominates the community; however, areas of sod have been removed resulting in bare ground. Annuals, such as kochia and halogeton, are beginning to invade. Alkali sacaton has been completely removed from the plant community.	1400	0.38	0.46
Halogeton / Salt Crust	The resulting bare ground has developed extensive salt crusts. Halogeton dominates the site. Only remnants of perennial plants exist with annuals such as kochia and Russian thistle.	800	0.22	0.69
Russian Olive	Dense populations of Russian Olive exist with scattered perennials and annuals in the understory.	2100	0.58	0.69



Saline Subirrigated (15-17")—Alkali Sacaton / Western Wheatgrass / Inland Saltgrass Plant Community (HCPC)

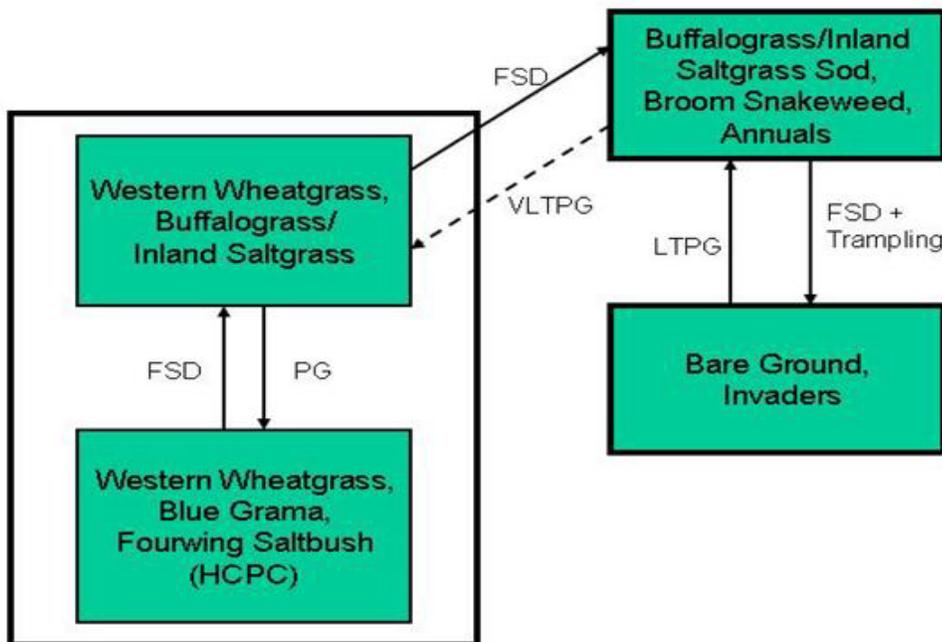
COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES AND GRASSLIKES				
Sacaton/Cordgrass			1400-1925	40-55
Alkali Cordgrass	Spartina gracilis	SPGR	175-350	5-10
Alkali Sacaton	Sporobolus airoides	SPAI	1225-1575	35-45
Wheatgrasses			350-875	10-25
Slender Wheatgrass	Elymus trachycaulus	ELTR7	0-350	0-10
Western Wheatgrass	Pascopyrum smithii	PASM	350-525	10-15
Inland Saltgrass			350-525	10-15
Inland Saltgrass	Distichlis spicata	DISP	350-525	10-15
Bluegrasses			175-525	5-15
Bluegrass	Poa sp.	POA	0-175	0-5
Plains Bluegrass	Poa arida	POAR3	175-525	5-15
Sandberg Bluegrass	Poa secunda	POSE	175-525	5-15
Grasslikes			175-350	5-10
Baltic Rush	Juncus balticus	JUBA	0-175	0-5
Bulrush	Scirpus sp.	SCIRP	0-175	0-5
Sedge	Carex sp.	CAREX	175-350	5-10
Spikerush	Eleocharis sp.	ELEOC	0-175	0-5
Rush	Juncus sp.	JUNCU	0-175	0-5
Other Perennial Grasses			175-350	5-10
Canada Wildrye	Elymus canadensis	ELCA4	0-175	0-5
Foxtail Barley	Hordeum jubatum	HOJU	0-175	0-5
Little Bluestem	Schizachyrium scoparium	SCSC	0-175	0-5
Muhly	Muhlenbergia sp.	MUHLE	0-175	0-5
Nuttall's alkaligrass	Puccinellia nuttalliana	PUNU2	0-175	0-5
Scratchgrass	Muhlenbergia asperifolia	MUAS	0-175	0-5
Switchgrass	Panicum virgatum	PAVI2	0-175	0-5
Other Perennial Grasses		2GP	0-175	0-5
FORBS			175-350	5-10
Arrowgrass	Triglochin sp.	TRIGL	0-70	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-70	0-2
Horsetail	Equisetum sp.	EQUIS	0-70	0-2
Milkvetch	Astragalus sp.	ASTRA	0-70	0-2
Pursh Seepweed	Suaeda calceoliformis	SUCA2	0-70	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-70	0-2
Other Perennial Forbs		2FP	0-70	0-2
SHRUBS			0-175	0-5
Greasewood	Sarcobatus vermiculatus	SAVE4	0-175	0-5
Other Shrubs		2SHRUB	0-175	0-5

Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	2850	3500	4200

SITE: SALINE UPLAND R67AY144WY 12-14" precipitation

SITE DESCRIPTION: This site occurs on nearly level to moderately sloping uplands on hills alluvial fans and stream terraces. The soils of this site are moderately deep (greater than 20 inches to bedrock) to very deep, well drained soils that formed in alluvium from sodic or alkaline materials. These soils have moderate to slow permeability and are moderately to strongly alkaline or saline.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Western Wheatgrass / Blue Grama / Fourwing Saltbush	The potential vegetation is about 85% grasses, 5% forbs, and 10% woody plants. The grasses include western wheatgrass, blue grama, alkali sacaton, and needleandthread. Other grasses include buffalograss, inland saltgrass and green needlegrass. Forbs and shrubs such as scarlet globemallow, fourwing saltbush and winterfat also occur.	700	0.19	0.23
Western Wheatgrass / Buffalograss/Inland Saltgrass	Western wheatgrass, buffalograss and inland saltgrass are the primary grasses. Secondary grasses include blue grama, needleandthread, and alkali sacaton. Fourwing saltbush and winterfat are present in small amounts.	500	0.14	0.16
Buffalograss / Inland Saltgrass Sod / Broom Snakeweed / Annuals	The dominant grasses are sod bound buffalograss or inland saltgrass or both. Western wheatgrass is present as a secondary grass. All forbs have been reduced. The dominant shrub is broom snakeweed. Fourwing saltbush and winterfat if present are remnants.	300	0.08	0.10
Bare Ground Invaders	The plant composition is made up annuals with a few species of perennial forbs and grasses. Pricklypear cactus is found in mosaic patterns across the landscape. Remnant western wheatgrass will survive in these patches. Remnants of inland saltgrass and buffalograss can be found. Annual grasses, such as cheatgrass, have increased. Bare ground is significant.	300	0.08	0.10



- 'SD - Frequent and Severe Defoliation.
- .TPG - Long-term Prescribed Grazing.
- 'G - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season).
- 'LTPG - Very Long-term Prescribed Grazing (could take generations)

Saline Upland (12-14")— Western Wheatgrass / Blue Grama / Fourwing Saltbush Plant Community (HCPC)

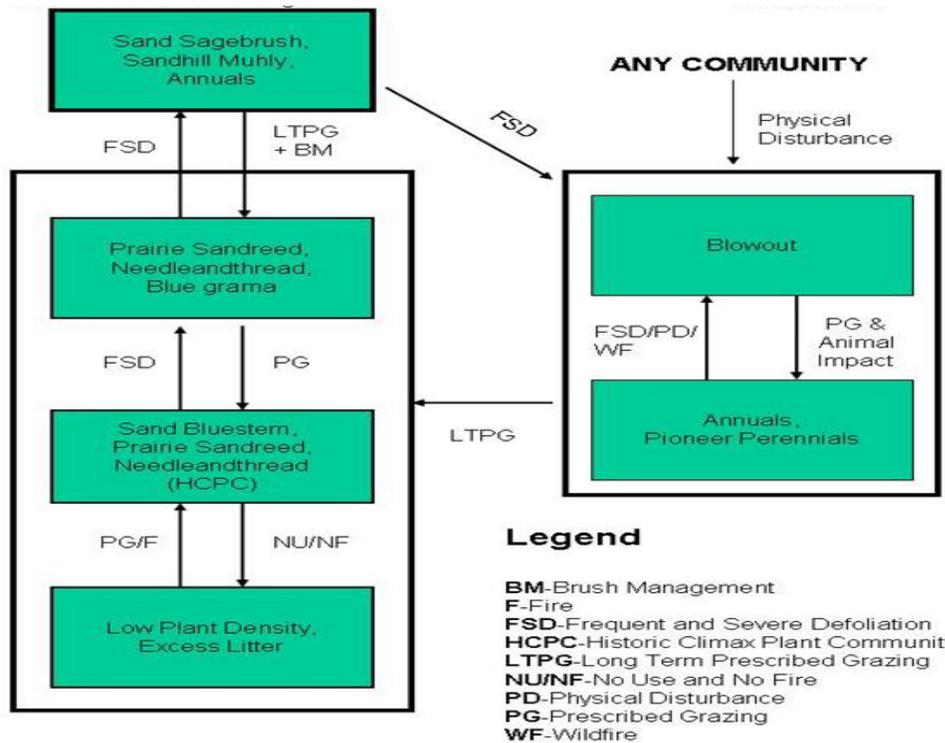
COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES AND GRASSLIKES				
Cool Season Bunchgrasses			70-140	10-20
Green Needlegrass	Nassella viridula	NAVI4	0-35	0-5
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-35	0-5
Needleandthread	Hesperostipa comata	HECO26	35-105	5-15
Western Wheatgrass			245-350	35-50
Western Wheatgrass	Pascopyrum smithii	PASM	245-350	35-50
Other Perennial Grasses			140-315	20-45
Alkali Sacaton	Sporobolus airoides	SPAI	35-105	5-15
Blue Grama	Bouteloua gracilis	BOGR2	70-175	10-25
Buffalograss	Bouteloua dactyloides	BODA2	35-70	5-10
Inland Saltgrass	Distichlis spicata	DISP	0-35	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-35	0-5
Grasslikes			0-70	
Sedge	Carex sp.	CAREX	0-35	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-35	0-5
FORBS			0-35	0-5
Curlycup Gumweed	Grindelia squarrosa	GRSQ	0-14	0-2
Rush Skeletonplant	Lygodesmia juncea	LYJU	0-14	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-35	0-5
Textile Onion	Allium textile	ALTE	0-14	0-2
Other Perennial Forbs		2FP	0-35	0-5
SHRUBS			35-70	5-10
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-14	0-2
Fourwing Saltbush	Atriplex canescens	ATCA2	7-70	1-10
Gardener's Saltbush	Atriplex gardneri	ATGA	0-14	0-2
Plains Prickly pear	Opuntia polyacantha	OPPO	0-14	0-2
Silverscale Saltbush	Atriplex argentea	ATAR2	0-14	0-2
Winterfat	Krascheninnikovia lanata	KRLA2	0-14	0-2

Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	500	700	1000

SITE: SANDS R067AY146WY 15-17" Precipitation

SITE DESCRIPTION: This site occurs on gently undulating rolling hills and ridges. The soils of this site are moderately deep (greater than 20" to bedrock) to very deep well drained to excessively drained. Soils formed in eolian deposits or alluvium. These soils have rapid permeability. The surface soils will be loamy very fine sand, loamy fine sand, loamy sand or sand. The soil will develop into active sand dunes with the deterioration of cover.

Community	Plant Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Sand Bluestem / Prairie Sandreed / Needleandthread	The potential vegetation is about 80-95% grasses, 0-10% forbs, and 0-10% woody plants. The major tall and mid-grasses include prairie sandreed, sand bluestem, and needleandthread. Other grasses and grass-likes include little bluestem, switchgrass, Indian ricegrass, blue grama, and sand lovegrass. A variety of forbs and half-shrubs also occur. Shrubs are not abundant.	1500	0.41	0.49
Prairie Sandreed / Needleandthread / Blue Grama	The plant community has a reduced component of mid-grasses with an understory of short sod-forming grasses. Dominant grasses include prairie sandreed, needleandthread, and blue grama. Sand bluestem, Indian ricegrass, and little bluestem may be present as secondary grasses. Significant forbs include dotted gayfeather, cudweed sagewort, spiderworts, and western ragweed. Shrubs include yucca, sand sagebrush, and Arkansas rose.	1100	0.30	0.36
Excessive Litter	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. The dominant grasses/grasslikes include needleandthread, Fendler's threeawn and western wheatgrass. Little bluestem, bluebunch wheatgrass, side-oats grama are present in secondary amounts. Noxious weeds have started to invade.	1200	0.33	0.39
Sand Sagebrush / Sandhill Muhly / Annuals	The dominant grasses are sandhill muhly, sand dropseed, and hairy grama. Prairie sandreed, blowout grass and upland sedges are present in small amounts. Significant forbs include western ragweed, annual sunflower, and bractless mentzelia. Significant shrubs include sand sagebrush, yucca, and pricklypear cactus.	900	0.25	0.30
Blowout	Sandhill muhly, blowout grass, and sandbur are common. All other grasses are absent. Lemon scurfpea, Rocky Mountain beplant, and western ragweed are common forbs.	100	0.03	0.03
Annual /Pioneer Perennials	The dominant grasses include blowout grass and sandhill muhly. Annual grasses such as sandbur and stinkgrass are common. The dominant forbs include lemon scurfpea, Rocky Mountain beplant, and annual sunflower. Prairie sandreed, hairy grama and Arkansas rose may be present in small amounts.	250	0.07	0.08



Sands (15-17" Precipitation) – Sand Bluestem / Prairie Sandreed / Needleandthread Plant Community (HCPC)

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Warm Season Tall Grasses			450-900	30-60
Sand Bluestem	Andropogon halli	ANHA	300-600	20-40
Prairie Sandreed	Calamovilfa longifolia	CALO	150-600	10-40
Switchgrass	Panicum virgatum	PAV12	0-150	0-10
Cool Season Grasses			150-450	10-30
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-150	0-10
Needleandthread	Hesperostipa comata	HECO26	150-450	10-30
Little Bluestem			75-300	5-20
Little Bluestem	Schizachyrium scoparium	SCSC	75-300	5-20
Blue Grama			0-150	0-10
Blue Grama	Bouteloua gracilis	BOGR2	0-150	0-10
Other Perennial Grasses & Grass-likes			150-225	10-15
Blowout Grass	Redfieldia flexuosa	REFL	0-75	0-5
Hairy Grama	Bouteloua hirsuta	BOH12	0-75	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-75	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-75	0-5
Sand Lovegrass	Eragrostis trichodes	ERTR3	0-75	0-5
Sandhill Muhly	Muhlenbergia pungens	MUPU2	0-75	0-5
Sedge	Carex	CAREX	0-75	0-5
Other Perennial Grasses		2GP	0-75	0-5
FORBS			75-150	5-10
Beardtongue	Penstemon sp.	PENST	0-30	0-2
Bush Morning Glory	Ipomea leptophylla	IPLA	0-30	0-2
Chalk Hill Hymenopappus	Hymenopappus tenuifolius	HYTE2	0-30	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-30	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-30	0-2
Evening Primrose	Oenothera spp.	OENOT	0-30	0-2
False Boneset	Brickellia eupatorioides	BREU	0-30	0-2
Field Sagewort	Artemisia campestris	ARCA12	0-30	0-2
Flaxflowered Ipomopsis	Ipomopsis longiflora	IPLO2	0-30	0-2
Indian Breadroot	Pediomelum sp.	PEDIO2	0-30	0-2
Ironweed	Vernonia sp.	VERNO	0-30	0-2
Larkspur	Delphinium sp.	DELPH	0-30	0-2
Prairie Clover	Dalea sp.	DALEA	0-30	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-30	0-2
Rush Skeletonplant	Lygodesmia juncea	LYJU	0-30	0-2
Ragwort	Senecio sp.	SENEC	0-30	0-2
Scarlet Globe Mallow	Sphaeralcea coccinea	SPCO	0-30	0-2
Scurfpea	Psoralegium sp.	PSORA2	0-30	0-2
Spiderwort	Tradescantia sp.	TRADE	0-30	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-30	0-2
Veiny Dock	Rumex venosus	RUVE2	0-30	0-2
White Heath Aster	Symphotrichum ericoides	SYER	0-30	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-30	0-2
Other Perennial Forbs		2FP	0-75	0-5
SHRUBS			75-150	5-10
Brittle Pricklypear	Opuntia fragilis	OPFR	0-30	0-2
Plains Pricklypear	Opuntia polyacantha	OPPO	0-30	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-30	0-2
Sand Sagebrush	Artemisia filifolia	ARFI2	0-75	0-5
Soapweed Yucca	Yucca glauca	YUGL	0-30	0-2
Spinystar	Escobaria vivipara	ESVI2	0-30	0-2
Western Sandcherry	Prunus pumila var. besseyi	PRPUB	0-30	0-2
Other Shrubs		2SHRUB	0-75	0-5

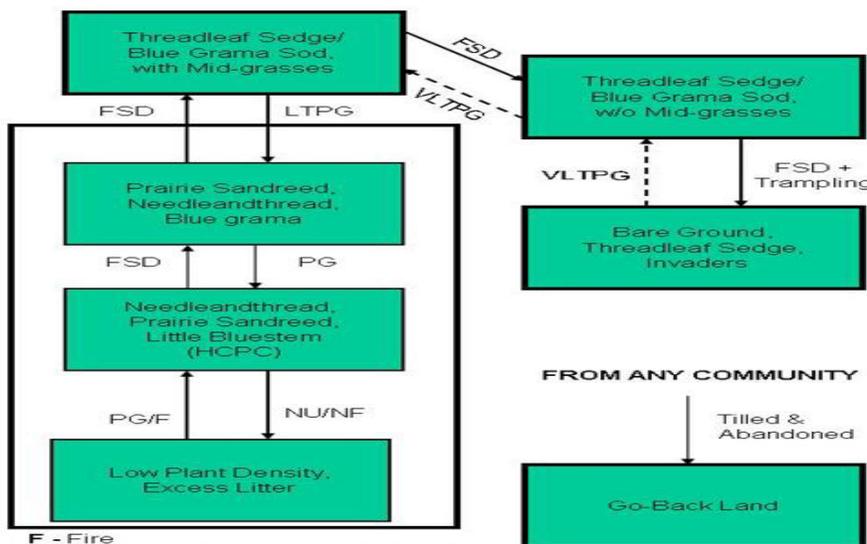
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	1000	1500	2000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SANDY R067AY150WY 15-17" Precipitation

SITE DESCRIPTION: This site occurs on nearly level rolling uplands(hills), alluvial fans and stream terraces. The soils of this site are moderately deep (greater than 20" to bedrock) to very deep and well drained with moderate to moderately rapid permeability. These layers consist of an A horizon with sandy loams and fine sandy loams. Soils with fine sandy loam surfaces less than 6 inches thick with loam or clay loam subsoils are excluded.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Needleandthread / Prairie Sandreed / Little Bluestem	The site is dominated by needleandthread, prairie sandreed and little bluestem. Other grasses commonly occurring on the site include sand bluestem, blue grama, Indian ricegrass, rhizomatous wheatgrasses and threadleaf sedge. A variety of forbs, half-shrubs and shrubs occur. Plant diversity is high.	1500	0.41	0.49
Prairie Sandreed / Needleandthread / Rhizomatous Wheatgrass /Blue Grama	Dominant grasses include needleandthread, blue grama, and prairie sandreed. Little bluestem and sand bluestem, rhizomatous wheatgrasses and needleandthread are secondary grasses. Prairie sandreed is present and distributed across the site. The significant forbs include dotted gayfeather, cudweed sagewort, spiderworts, and upright prairie coneflower. Shrubs in this community include Arkansas rose, fringed sagewort, and broom snakeweed.	1100	0.30	0.36
Excessive Litter	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. Dominant grasses include prairie sandreed, needleandthread, and western wheatgrass. Other species include sand dropseed and threadleaf sedge. Dominant forbs include annual sunflower and ten-petal mentzelia. Dominant shrubs include cactus and fringed sagewort.	1200	0.33	0.39
Threadleaf Sedge/Blue Grama Sod with Mid-Grasses	The dominant grasses and grass-like are threadleaf sedge and blue grama. Other perennial grasses present include prairie sandreed, sand dropseed, and some rhizomatous wheatgrass. Significant forbs include western ragweed, slimflower scurfpea, and cudweed sagewort	900	0.25	0.30
Threadleaf Sedge/Blue Grama Sod	Threadleaf sedge, blue grama, buffalograss, threeawns, fringed sagewort, spreading buckwheat, pricklypear cactus, and broom snakeweed are the most common plants. Tall grasses and most mid grasses are absent.	600	0.16	0.20
Bare Ground / Threadleaf Sedge / Invaders	The dominant grasses include threadleaf sedge, blue grama, and threeawns. Annual grasses such as cheatgrass and sixweeks fescue have increased. The dominant perennial forbs include curlycup gumweed, western ragweed, and hairy goldaster. Broom snakeweed, spreading buckwheat, and pricklypear cactus are common.	600	0.16	0.20
Go-back	The dominant grasses include threeawn, sand dropseed, Sandberg bluegrass, cheatgrass, and sixweeks fescue. Other grasses may include crested wheatgrass, little bluestem, western wheatgrass, and needleandthread. Forbs can include annual sunflower, ten-petal mentzelia, and rocky mountain beeplant. Significant shrubs include broom snakeweed and green rabbitbush.	700	0.19	0.23



F - Fire
 FSD - Frequent and Severe Defoliation
 HCPC - Historic Climax Plant Community
 LTPG - Long-term Prescribed Grazing
 NU/NF - No Use and No Fire
 PG - Prescribed Grazing
 VLTPG - Very Long-term Prescribed Grazing

Sandy (15-17" Precipitation) – N

eedleandthread / Prairie Sandreed / Little Bluestem (HCPC)

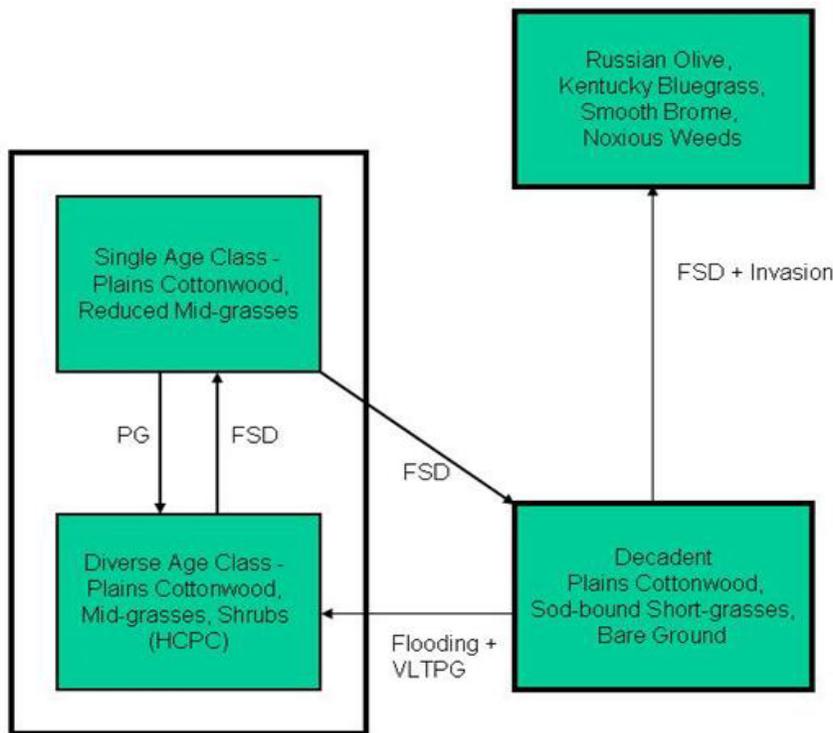
Warm Season Tall Grasses			225-750	15-50
Little Bluestem	Schizachyrium scoparium	SCSC	75-300	5-20
Prairie Sandreed	Calamovilfa longifolia	CALO	150-450	10-30
Sand Bluestem	Andropogon hallii	ANHA	0-225	0-15
Cool Season Grasses			225-600	15-40
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-150	0-10
Needleandthread	Hesperostipa comata	HECO26	225-600	15-40
Blue Grama			75-225	5-15
Blue Grama	Bouteloua gracilis	BOGR2	75-225	5-15
Rhizomatous Wheatgrasses			75-150	5-10
Streambank Wheatgrass	Elumus lanceolatus	ELLAL	0-150	0-10
Western Wheatgrass	Pascopyrum smithii	PASM	75-150	5-10
Other Perennial Grasses			75-150	5-10
Plains Reedgrass	Calamagrostis montanensis	CAMO	0-75	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-75	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-75	0-5
Sideoats Grama	Bouteloua curtipendula	BOCU	0-75	0-5
Threawn	Aristida sp.	ARIST	0-30	0-2
Other Perennial Grasses		2GP	0-75	0-5
Grasslikes			0-150	0-10
Sedge	Carex sp.	CAREX	0-75	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-150	0-10
FORBS			75-225	5-15
American Vetch	Vicia americana	VIAM	0-30	0-2
Beardtongue	Penstemon sp.	PENST	0-30	0-2
Bush Morning Glory	Ipomea leptophylla	IPLA	0-30	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-30	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-30	0-2
Evening Primrose	Oenothera spp.	OENOT	0-30	0-2
False Boneset	Brickellia eupatorioides	BREU	0-30	0-2
Goldenrod	Solidago sp.	SOPLID	0-30	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-30	0-2
Indian Breadroot	Pediomelum sp.	PEDIO2	0-30	0-2
Ironweed	Vernonia sp.	VERNO	0-30	0-2
Larkspur	Delphinium sp.	DELPH	0-30	0-2
Milkvetch	Astragalus sp.	ASTRA	0-30	0-2
Prairie Clover	Dalea sp.	DALEA	0-30	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-75	0-2
Pussytoes	Antennaria sp.	ANTEN	0-30	0-2
Ragwort	Senecio sp.	SENEC	0-30	0-2
Sanddune Wallflower	Erysimum capitatum	ERCA15	0-30	0-2
Scarlet Beeblossom	Gaura coccinea	GACOS	0-30	0-2
Scarlet Globe Mallow	Sphaeralcea coccinea	SPCO	0-30	0-2
Scurfpea	Psoralea sp.	PSORA2	0-30	0-2
Spiderwort	Tradescantia sp.	TRADE	0-30	0-2
Spreading Buckwheat	Eriogonum effusum	EREF	0-30	0-2
Tenpetal Blazingstar	Mentzelia decapetala	MEDE2	0-30	0-2
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-30	0-2
Veiny Dock	Rumex venosus	RUVE2	0-30	0-2
White Heath Aster	Symphotrichum ericoides	SYER	0-30	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-30	0-2
Other Perennial Forbs		2FP	0-75	0-5
SHRUBS			0-225	0-15
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-30	0-2
Fourwing Saltbush	Atriplex canescens	ATCA2	0-30	0-2
Plains Pricklypear	Opuntia polyacantha	OPPO	0-30	0-2
Prairie Rose	Rosa arkansana	ROAR3	0-30	0-2
Sand Sagebrush	Artemisia filifolia	ARFI2	0-75	0-5
Silver Sagebrush	Artemisia cana	ARCA13	0-75	0-5
Western Sandcherry	Prunus pumila var. besseyi	PRPUB	0-30	0-2
Other Shrubs		2SHRUB	0-75	0-5

Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL:	1000	1500	2000

SITE: SANDY LOWLAND (15-17" Precipitation) R067AY152WY

SITE DESCRIPTION: This site occurs on nearly level areas that receive additional water from overflow of intermittent streams or runoff from adjacent slopes and have a water table within reach of trees (within 20 feet). The soils of this site are deep to very deep, well to excessively well drained and mixed alluvium.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Diverse Age Class – Plains Cottonwood / Mid-grasses / Shrubs	The potential vegetation is about 65-85% grasses, 5-10% forbs, and 5-10% shrubs. The site is highly variable with a diverse mix of mid to tall grasses, forbs, shrubs and trees. Trees can make up 5-15% of the total annual production (10-30% canopy cover). The major grasses include needleandthread, prairie sandreed, little bluestem, and sand bluestem. Various species of shrubs and trees typically occur such as roses, silver sagebrush, western snowberry, plains cottonwood, box elder, and green ash. In addition, numerous other species of grasses can occur, along with a wide variety of forbs.	2500	0.69	0.82
Single Age Class – Plains Cottonwood / Reduced Mid-grasses	Dominant grasses are blue grama and western wheatgrass. Needleandthread, little bluestem, and sand bluestem are present as remnants. Palatable shrubs and trees are heavily browsed.	1750	0.48	0.58
Decadent Plains Cottonwood / Sod-bound Short-grasses / Bare Ground	The dominant grass is blue grama. Other grasses include threadleaf sedge and three awns. The palatable forbs and shrubs have been nearly eliminated. Remaining trees are decadent and are beginning to die.	1250	0.34	0.41
Russian Olive / Kentucky bluegrass / Smooth Brome / Noxious Weeds	The dominant grasses include Kentucky bluegrass, smooth brome, threeawn, blue grama, and threadleaf sedge. Annual grasses such as cheatgrass and sixweeks fescue have invaded. The dominant perennial forbs include curlycup gumweed and hairy goldaster. Major shrubs include broom snakeweed, pricklypear cactus, and green sagewort. Noxious weeds, such as leafy spurge, Canada thistle, and hound's tongue may be present. Introduced trees, such as Russian olive and tamarix have invaded.	500	0.14	0.16



FSD - Frequent and Severe Defoliation.
PG - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season).
VLTPG - Very Long-term Prescribed Grazing (could take generations)

Sandy Lowland-- Diverse Age Class – Plains Cottonwood / Mid-grasses / Shrubs Plant Community (HCPC)

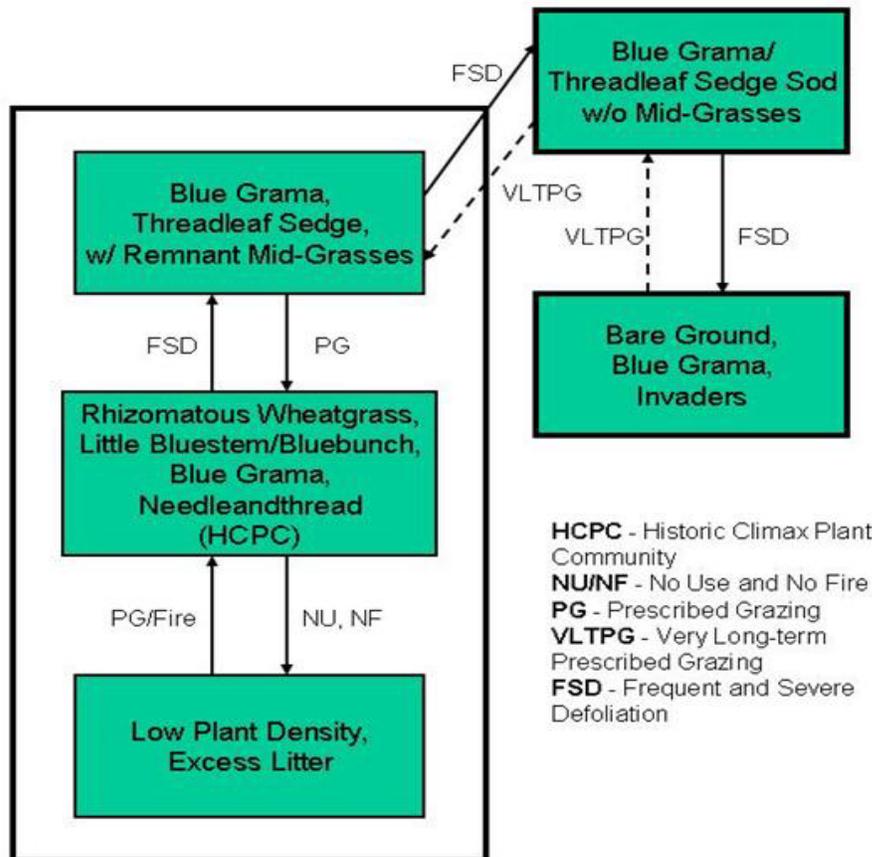
COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition		
GRASSES & GRASS-LIKES						
Warm Season Tall & Mid- Grasses			375-1125	15-45		
Little Bluestem	Schizachyrium scoparium	SCSC	250-750	10-30		
Prairie Sandreed	Calamovilfa longifolia	CALO	125-875	5-35		
Sand Bluestem	Andropogon halli	ANHA	125-750	5-30		
Switchgrass	Panicum virgatum	PAVI2	0-250	0-10		
Needleandthread			375-1000	15-40		
Needleandthread	Hesperostipa comata	HECO26	375-1000	15-40		
Rhizomatous Wheatgrasses			125-250	5-10		
Streambank Wheatgrass	Elumus lanceolatus	ELLAL	125-250	5-10		
Western Wheatgrass	Pascopyrum smithii	PASM	125-250	5-10		
Blue Grama			125-250	5-10		
Blue Grama	Bouteloua gracilis	BOGR2	125-250	5-10		
Grasslikes			0-250	0-10		
Sedge	Carex sp.	CAREX	0-125	0-5		
Threadleaf Sedge	Carex filifolia	CAFI	0-250	0-10		
Other Perennial Grasses			250-375	10-15		
Alkali Bluegrass	Poa secunda	POSE	0-125	0-5		
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-125	0-5		
Prairie Junegrass	Koeleria macrantha	KOMA	0-125	0-5		
Sandberg Bluegrass	Poa secunda	POSE	0-125	0-5		
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-125	0-5		
Other Graminoids		2GRAM	0-125	0-5		
FORBS			125-250	5-10		
American Vetch	Vicia americana	VIAM	0-50	0-2		
Beardtongue	Penstemon sp.	PENST	0-50	0-2		
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-50	0-2		
Dotted Blazing Star	Liatris punctata	LIPU	0-50	0-2		
Evening Primrose	Oenothera spp.	OENOT	0-50	0-2		
False Boneset	Brickellia eupatorioides var. corymbulosa	BREUC	0-50	0-2		
Hairy False Goldenaster	Heterotheca vilosa	HEVI4	0-50	0-2		
Ironweed	Vernonia sp.	VERNO	0-50	0-2		
Larkspur	Delphinium sp.	DELPH	0-50	0-2		
Milkvetch	Astragalus sp.	ASTRA	0-50	0-2		
Prairie Clover	Dalea sp.	DALEA	0-50	0-2		
Prairie Sagewort	Artemisia frigida	ARFR4	0-50	0-2		
Pussytoes	Antennaria sp.	ANTEN	0-50	0-2		
Ragwort	Senecio sp.	SENEC	0-50	0-2		
Scarlet Globe Mallow	Sphaeralcea coccinea	SPCO	0-50	0-2		
Scurfpea	Psoralidium sp.	PSORA2	0-50	0-2		
Upright Prairie Coneflower	Ratibida columnifera	RACO3	0-50	0-2		
White Heath Aster	Symphyotrichum ericoides	SYER	0-50	0-2		
White Sagebrush	Artemisia ludoviciana	ARLU	0-50	0-2		
Other Perennial Forbs		2FP	0-125	0-5		
SHRUBS			125-375	5-15		
Leadplant	Amorpha canescens	AMCA6	0-50	0-2		
Plains Pricklypear	Opuntia polyacantha	OPPO	0-50	0-2		
Rose	Rosa sp.	ROSA	0-125	0-5		
Sand Sagebrush	Artemisia filifolia	ARFI2	0-125	0-5		
Silver Sagebrush	Artemisia cana	ARCA13	125-250	5-10		
Western Sandcherry	Prunus pumila var. besseyi	PRPUB	0-125	0-5		
Western Snowberry	Symphoricarpos occidentalis	SYOC	0-125	0-5		
Other Shrubs		2SHRUB	0-125	0-5		
TREES			125-375	5-15		
Boxelder	Acer negundo	ACNE2	0-125	0-5		
Plains Cottonwood	Populus deltoides ssp. monilifera	PODEM	125-375	5-15		
			Annual Production lbs./acre	LOW	RV*	HIGH
			TOTAL	2000	2500	3000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SHALLOW LOAMY R067AY162WY 15-17" Precipitation

SITE DESCRIPTION: This site will often occur on steep slopes and ridge tops but can occur on all slopes and positions. The soils on this sites are shallow (less than 20" to bedrock) and well drained that formed in alluvium over residuum or residuum. These soils have moderate permeability and may occur on all slopes. The bedrock may be any kind which is virtually impenetrable to plant roots, except igneous. The surface soil will have one or more of the following textures: very fine sandy loam, loam, silt loam, sandy clay loam, silty clay loam, silty clay loam and clay loam.

Plant Community	Community Description	Ave. Prod. #/ac	AUM/AC	
			50% Use	60% Use
Rhizomatous Wheatgrass / Little Bluestem / Bluebunch / Blue Grama / Needleandthread	The potential vegetation is about 85-95% grasses or grass-like plants, 5-10% forbs, and 0-5% woody plants. The plant community is predominately cool-season mid-grasses, with a significant component of warm-season mid-grasses. The major grasses include little bluestem, rhizomatous wheatgrasses, and blue grama. Other grasses and grass-likes include needleandthread, threadleaf sedge, and sideoats grama. Bluebunch wheatgrass is found in Wyoming, primarily in the western portion of the MLRA.	1100	0.30	0.36
Blue Grama / Threadleaf Sedge / Remnant Mid-grasses	It typically is made up of sod-forming grasses with only remnants of mid-grasses remaining. The dominant grasses include blue grama and threadleaf sedge. Palatable forbs have been reduced.	850	0.23	0.28
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. Cool-season grasses, and cactus typically are prevalent. Noxious weeds such as Canada thistle, leafy spurge, and Dalmatian toadflax will invade, Annual weeds and Kentucky bluegrass tend to invade under these conditions.	1000	0.27	0.33
Blue Grama/Threadleaf Sedge Sod	It is a dense sod made up of warm season grasses and sedges. The dominant plants are blue grama and threadleaf sedge.	650	0.18	0.21
Bare Ground / Blue Grama / Invaders	The dominant grasses include blue grama, threadleaf sedge, and threeawns. Annual grasses such as cheatgrass and sixweeks fescue are common. The dominant forbs include curlycup gumweed, green sagewort, phlox, sandwort, hairy goldaster, and annuals. Broom snakeweed is a common shrub.	550	0.15	0.18



Shallow Loamy (15-17")—Rhizomatous Wheatgrass / Little Bluestem / Bluebunch / Blue Grama / Needleandthread

COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Warm Season Mid Grasses			165-330	15-30
Little Bluestem	Schizachyrium scoparium	SCSC	110-220	10-20
Sideoats Grama	Bouteloua curtipendula	BOCU	55-110	5-10
Cool Season Bunchgrasses			110-330	10-25
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	0-165	0-15
Needleandthread	Hesperostipa comata	HECO26	110-165	10-15
Rhizomatous Wheatgrasses			165-275	15-25
Streambank Wheatgrass	Elmus lanceolatus	ELLAL	165-275	15-25
Western Wheatgrass	Pascopyrum smithii	PASM	165-275	15-25
Blue Grama			165-220	15-30
Blue Grama	Bouteloua gracilis	BOGR2	165-220	15-20
Grasslikes			55-110	5-10
Sedge	Carex sp.	CAREX	0-55	0-5
Threadleaf Sedge	Carex filifolia	CAFI	55-110	5-10
Other Perennial Grasses			55-110	5-10
Alkali Bluegrass	Poa secunda	POSE	0-55	0-5
Buffalograss	Bouteloua dactyloides	BODA2	0-55	0-5
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-55	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-55	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-55	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-55	0-5
Threawn	Aristida sp.	ARIST	0-22	0-2
Other Perennial Grasses			2GP	0-55
FORBS			55-110	5-10
Beardtongue	Penstemon sp.	PENST	0-22	0-2
Buckwheat	Eriogonum sp.	ERIOG	0-22	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-22	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-22	0-2
Field Sagewort	Artemisia campestris	ARCA12	0-22	0-2
Goldenrod	Solidago sp.	SOLID	0-22	0-2
Hairy False Goldenaster	Heterotheca vilosa	HEVI4	0-22	0-2
Lemon Scurfpea	Psoraleidium lanceolatum	PSLA3	0-22	0-2
Milkvetch	Astragalus sp.	ASTRA	0-22	0-2
Prairie Clover	Dalea sp.	DALEA	0-22	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-55	0-2
Ragwort	Senecio sp.	SENEC	0-22	0-2
Scarlet Beeblossom	Gaura coccinea	GACO5	0-22	0-2
Scarlet Globe Mallow	Sphaeralcea coccinea	SPCO	0-22	0-2
White Heath Aster	Symphyotrichum ericoides	SYER	0-22	0-2
White Sagebrush	Artemisia ludoviciana	ARLU	0-22	0-2
Other Perennial Forbs			2FP	0-55
SHRUBS			0-55	0-5
Alderleaf Mountain Mahogany	Cercocarpus montanus	CEMO2	0-55	0-5
Broom Snakeweed	Gutierrezia sarothrade	GUSA2	0-22	0-2
Plains Pricklypear	Opuntia polyacantha	OPPO	0-22	0-2
Skunkbush Sumac	Rus trilobata	RHTR	0-22	0-2
Soapweed Yucca	Yucca glauca	YUGL	0-55	0-5
Winterfat	Krascheninnikovia lanata	KRLA2	0-55	0-5
Other Shrubs			2SHRUB	0-55

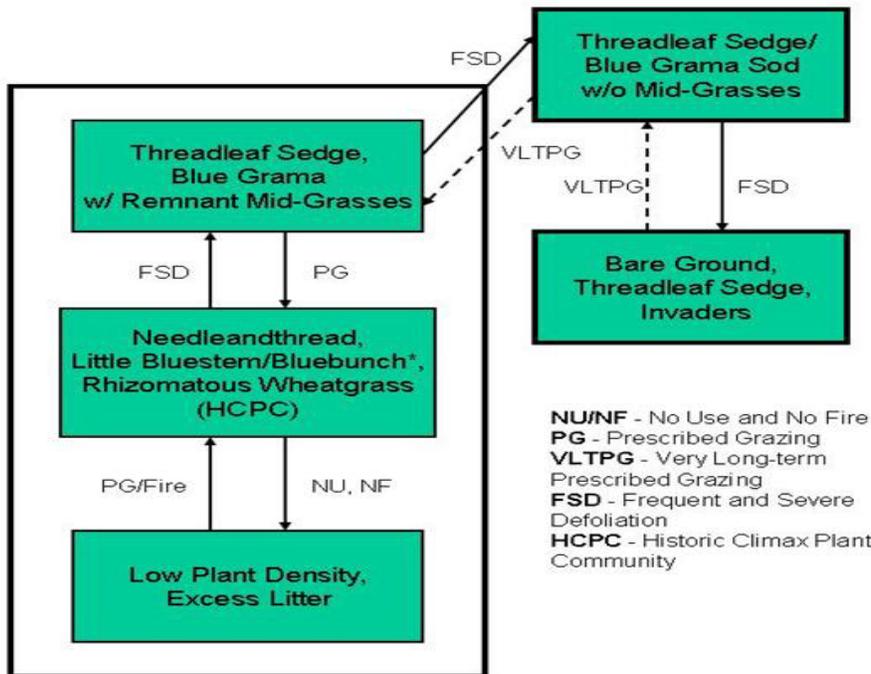
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	750	1100	1500

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SHALLOW SANDY R067AY165WY 15-17" Precipitation

SITE DESCRIPTION: This site will occur on steep slopes and ridge tops but will occur on all slopes and positions. The soils on this sites are shallow (less than 20" to bedrock) and well drained that formed in alluvium over residuum or residuum. These soils have moderate permeability and may occur on all slopes. The bedrock may be any kind which is virtually impenetrable to plant roots, except igneous. The surface soil will have one or more of the following textures: very fine sandy loam, loam, silt loam, sandy clay loam, silty clay loam, silty clay loam and clay loam.

Plant Community	Community Description	Ave. Prod. #/ac	AUM/AC	
			50% Use	60% Use
Needleandthread / Little Bluestem / Bluebunch Wheatgrass / Rhizomatous Wheatgrass	The potential vegetation is about 80-95% grasses or grass-like plants, 5-15% forbs, and 0-5% woody plants. Combinations of warm and cool-season mid-grasses dominate the plant community. The major grasses and grass-likes include needleandthread, little bluestem, rhizomatous wheatgrasses, threadleaf sedge, and blue grama. Other grasses include prairie sandreed, sideoats grama, and bluebunch wheatgrass. Bluebunch wheatgrass is found in the Western portions of the MLRA. Dominant forbs are prairie clovers, dotted gayfeather, hairy goldaster, fringed sagewort, buckwheats, and lemon scurfpea. Commonly found shrubs include yucca, winterfat, and pricklypear cactus. Skunkbush sumac.	1100	0.30	0.36
Threadleaf Sedge / Blue Grama / Remnant Mid-Grasses	Dominant grasses/grass-likes include blue grama and threadleaf sedge. Little bluestem, sideoats grama, prairie sandreed, wheatgrass and needleandthread are present as remnants. Significant forbs include cudweed sagewort, hairy goldaster, western ragweed, and slimflower scurfpea. Common shrubs include broom snakeweed, yucca, and pricklypear cactus.	850	0.23	0.28
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers and rhizomatous wheatgrasses form small communities. Western Wheatgrass is dominant. Blue grama, little bluestem, threadleaf sedge and needleandthread are secondary grasses. Kentucky bluegrass, annual weeds, cool-season grasses, and cactus typically are common. Noxious weeds such as Canada thistle, leafy spurge, and Dalmatian toadflax may have invaded.	1000	0.27	0.33
Threadleaf Sedge/Blue Grama Sod	Blue grama and threadleaf sedge dominate the site. The mid-grasses and palatable forbs have been nearly eliminated. Remnants of rhizomatous wheatgrass may be present. Palatable forbs have been eliminated.	650	0.18	0.21
Bare Ground / Threadleaf sedge / Invaders	The dominant perennial grasses and grass-likes include threadleaf sedge, blue grama, and threeawns. Annual grasses such as cheatgrass and sixweeks fescue have increased. The dominant forbs include curlycup gumweed, phlox, sandwort, hairy goldaster, green sagewort, and annuals. Broom snakeweed, yucca, and pricklypear cactus are common.	550	0.15	0.18



* Bluebunch wheatgrass is more prevalent on cooler sites in MLRA 67 than little bluestem.

Shallow Sandy (15-17")— Needleandthread / Little Bluestem / Bluebunch Wheatgrass / Rhizomatous Wheatgrass

COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Warm Season Grasses			165-440	15-40
Little Bluestem	Schizachyrium scoparium	SCSC	110-220	10-20
Prairie Sandreed	Calamovilfa longifolia	CALO	55-110	5-10
Sideoats Grama	Bouteloua curtipendula	BOCU	0-110	0-10
Cool Season Bunchgrasses			165-275	15-25
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	0-110	0-10
Needleandthread	Hesperostipa comata	HECO26	165-275	15-25
Rhizomatous Wheatgrasses			110-165	10-15
Streambank Wheatgrass	Elmus lanceolatus	ELLAL	55-165	5-15
Western Wheatgrass	Pascopyrum smithii	PASM	55-165	5-15
Blue Grama			110-165	10-15
Blue Grama	Bouteloua gracilis	BOGR2	110-165	10-15
Grasslikes			55-165	5-15
Sedge	Carex sp.	CAREX	0-55	0-5
Threadleaf Sedge	Carex filifolia	CAFI	55-165	5-15
Other Perennial Grasses			55-110	5-10
Hairy Grama	Bouteloua hirsuta	BOH12	0-55	0-5
Indian Ricegrass	Achnatherum hymenoides	ACHY	0-55	0-5
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-55	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-55	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-55	0-5
Sand Bluestem	Andropogon hallii	ANHA	0-55	0-5
Sand Dropseed	Sporobolus cryptandrus	SPCR	0-55	0-5
Threeawn	Aristida sp.	ARIST	0-55	0-5
Other Perennial Grasses		2GP	0-55	0-5
FORBS			55-165	5-15
Beardtongue	Penstemon sp.	PENST	0-55	0-5
Buckwheat	Eriogonum sp.	ERIOG	0-55	0-5
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-55	0-5
Dotted Blazing Star	Liatris punctata	LIPU	0-55	0-5
Field Sagewort	Artemisia campestris	ARCA12	0-55	0-5
Hairy False Goldenaster	Heterotheca vilosa	HEVI4	0-55	0-5
Lemon Scurfpea	Psoraleidum lanceolatum	PSLA3	0-55	0-5
Milkvetch	Astragalus sp.	ASTRA	0-55	0-5
Prairie Clover	Dalea sp.	DALEA	0-55	0-5
Prairie Sagewort	Artemesia frigida	ARFR4	0-55	0-5
Ragwort	Senecio sp.	SENEC	0-55	0-5
Scarlet Beeblossom	Gaura coccinea	GACO5	0-55	0-5
Scarlet Globe Mallow	Sphaeralcea coccinea	SPCO	0-55	0-5
White Heath Aster	Symphotrichum ericoides var. ericoides	SYERE	0-55	0-5
White Sagebrush	Artemisia ludoviciana	ARLU	0-55	0-5
Other Perennial Forbs		2FP	0-55	0-5
SHRUBS			0-55	5-15
Alderleaf Mountain Mahogany	Cercocarpus montanus	CEMO2	0-55	0-5
Broom Snakeweed	Gutierrezia sarothrade	GUSA2	0-55	0-5
Plains Pricklypear	Opuntia polyacantha	OPPO	0-55	0-5
Skunkbush Sumac	Rus trilobata	RHTR	0-55	0-5
Soapweed Yucca	Yucca glauca	YUGL	0-55	0-5
Winterfat	Krascheninnikovia lanata	KRLA2	0-55	0-5
Other Shrubs		2SHRUB	0-55	0-5

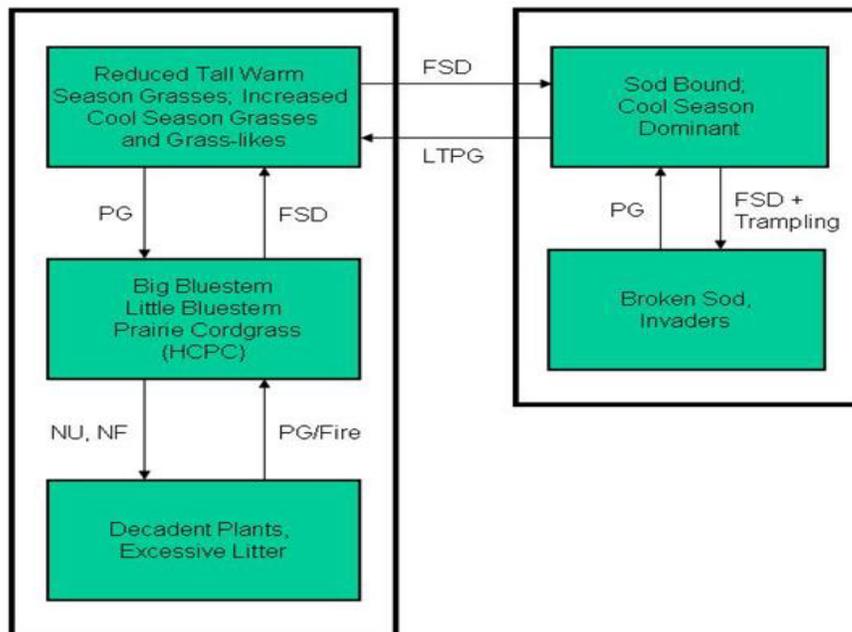
Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	750	1100	1500

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: SUBIRRIGATED R067AY174WY (15-17" PRECIPITATION)

SITE DESCRIPTION: This site occurs on nearly level bottomlands and alluvial fans adjacent to streams, springs and ponds. The depth to water table ranges from 12-40". The soils of this site are deep to very deep moderately well drained and formed in alluvium. These soils have water tables below the surface for all of the growing season. The water table is non-saline and non-alkaline.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Big Bluestem / Little Bluestem / Prairie Cordgrass	The potential vegetation is about 80-95% grasses and grass-likes, 5-10% forbs, and 0-10% woody plants. Tall and mid warm-season grasses dominate this community. The major grasses include big bluestem, little bluestem, prairie cordgrass and switchgrass. Other grasses and grass-likes include western wheatgrass, Canada wildrye, Baltic rush, spike rushes, and bulrushes. Key forbs and shrubs include American licorice, Maximilian sunflower, clovers, milk vetches and willows.	4500	1.23	1.48
Reduced Tall Warm Season Grasses / Increased Cool Season Grasses and Grass-likes	Big bluestem, prairie cordgrass, Indiangrass, switchgrass, and Canada wildrye have been significantly reduced. Little bluestem may initially increase or decrease depending upon the season of use. Kentucky bluegrass has begun to invade. Forbs and shrubs are still present in small amounts. This plant community is at risk of losing tall warm season grasses, palatable forbs and shrubs.	2600	0.71	0.86
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers. Big bluestem, Indiangrass, Switchgrass and Canada wild rye are common, but in reduced vigor. Noxious weeds such as Canada thistle, leafy spurge, and Dalmatian toadflax will invade, Annual weeds and Kentucky bluegrass tend to invade under these conditions.	3800	1.04	1.25
Sod Bound Cool Season	The plant community is predominantly cool season grasses and grass-likes. Kentucky bluegrass has fully invaded the community and persists in a sod-bound condition. Baltic rush, various sedges, and foxtail barley have are common. Remnant amounts of western wheatgrass may still persist in localized colonies. Forbs such as annual kochia and Russian thistle are common.	2300	0.63	0.76
Broken Sod / Invaders	Kentucky bluegrass still dominates the community, however areas of sod have been removed resulting in a broken sod-bound appearance. Bare ground may be a concern if water table levels are low. Dalmatian toadflax, cheatgrass and leafy spurge tend to invade.	1800	0.49	0.59



FSD - frequent severe defoliation,
HCPC - Historic Climax Plant Community,
LTPG - long-term prescribed grazing (>20 years),
NF, NU - no fire, non-use,
PG - prescribed grazing with adequate recovery opportunity

Subirrigated (15-17" Precipitation)– Big Bluestem / Little Bluestem / Prairie Cordgrass Plant Community (HCPC)

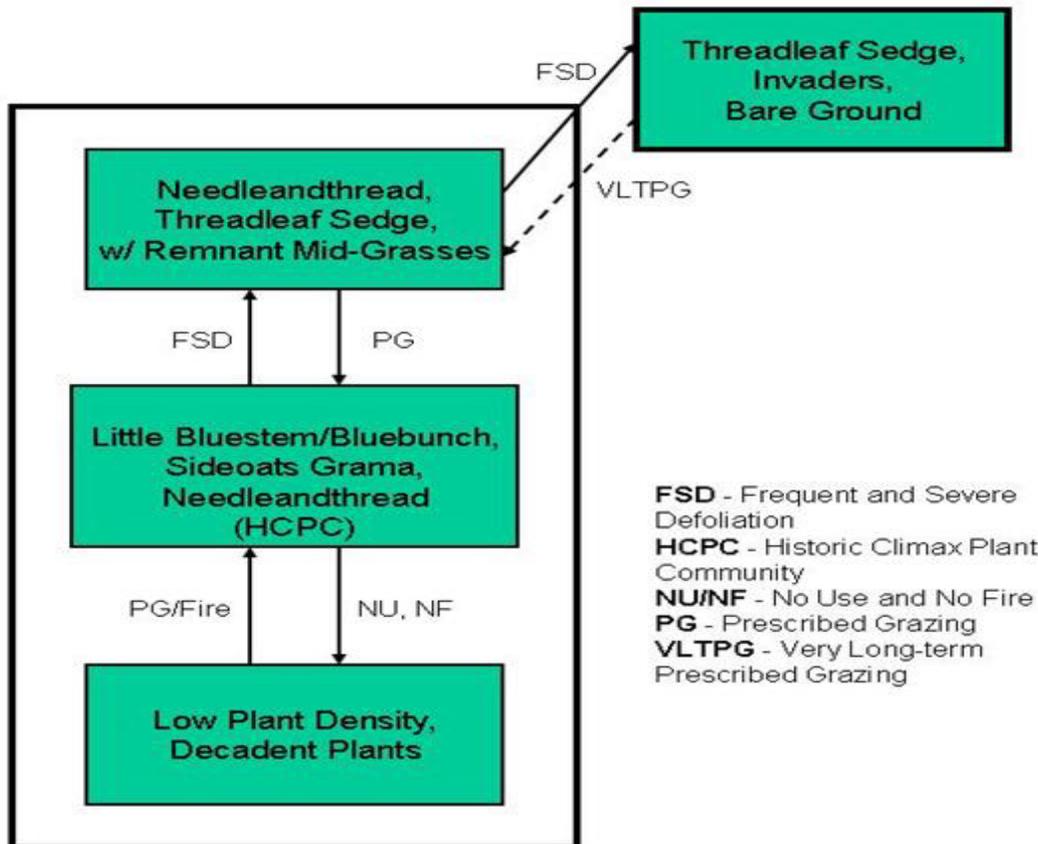
COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition		
GRASSES & GRASS-LIKES						
Warm Season Tall & Mid- Grasses			2700-2925	60-65		
Big Bluestem	Andropogon gerardii	ANGE	900-1125	20-25		
Indiangrass	Sorghastrum nutans	SONU2	225-675	5-15		
Little Bluestem	Schizachyrium scoparium	SCSC	675-900	15-20		
Prairie Cordgrass	Spartina pectinata	SPPE	450-675	10-15		
Switchgrass	Panicum virgatum	PAV12	225-450	5-10		
Cool Season Grasses			450-900	50-20		
Basin Wildrye	Leymus cinereus	LECI4	0-450	0-10		
Slender Wheatgrass	Elymus trachycaulus	ELTR7	225-450	5-10		
Western Wheatgrass	Pascopyrum smithii	PASM	225-450	5-10		
Grasslikes			225-450	5-10		
Baltic Rush	Juncus balticus	JUBA	0-90	0-2		
Bulrush	Scirpus sp.	SCIRP	0-90	0-2		
Sedge	Carex sp.	CAREX	225-450	5-10		
Spikerush	Eleocharis sp.	ELEOC	0-90	0-2		
Rush	Juncus sp.	JUNCU	0-90	0-2		
Other Perennial Grasses			225-450	5-10		
Alkali Sacaton	Sporobolus airoides	SPAI	0-225	0-5		
Bluegrass	Poa sp.	POA	0-225	0-5		
Canada Wildrye	Elymus canadensis	ELCA4	0-225	0-5		
Foxtail Barley	Hordeum jubatum	HOJU	0-225	0-5		
Other Perennial Grasses		2GP	0-225	0-5		
FORBS			225-450	5-10		
American Licorice	Glycyrrhiza lepidota	GLLE3	0-90	0-2		
Arrowgrass	Triglochin sp.	TRIGL	0-90	0-2		
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-90	0-2		
False Boneset	Brickellia eupatorioides	BREU	0-90	0-2		
Horsetail	Equisetum sp.	EQUIS	0-90	0-2		
Maximilian Sunflower	Helianthus maximiliani	HEMA2	0-90	0-2		
Milkvetch	Astragalus sp.	ASTRA	0-90	0-2		
Pennsylvania smartweed	Polygonum pensylvanicum	POPE2	0-90	0-2		
Pursh Seepweed	Suaeda calceoliformis	SUCA2	0-90	0-2		
White Heath Aster	Symphyotrichum ericoides	SYER	0-90	0-2		
White Sagebrush	Artemisia ludoviciana	ARLU	0-90	0-2		
Other Perennial Forbs		2FP	0-225	0-5		
SHRUBS			0-450	0-10		
Rose	Rosa sp.	ROSA	0-225	0-5		
Silver Buffaloberry	Shepherdia argentea	SHAR	0-225	0-5		
Western Snowberry	Symphoricarpos occidentalis	SYOC	0-225	0-5		
Willow	Salix sp.	SALIX	0-450	0-10		
Other Shrubs		2SHRUB	0-225	0-5		
			Annual Production lbs./acre	LOW	RV*	HIGH
			TOTAL	4000	4500	5000

*This list of plants and their relative proportions are based on near normal years. Fluctuations in species composition and relative production may change from year to year dependent upon precipitation or other climatic fluctuations. *RV = Representative Value.

SITE: VERY SHALLOW (15-17" Precipitation) R067AY176WY

SITE DESCRIPTION: This site occurs on steep slopes, escarpments, and ridge tops but may occur on all slopes (0-30%). The soils of this site are very shallow (less than 10" to bedrock) well drained soils formed in residuum. These soils have rapid to slow permeability and can be of any texture. The bedrock will include all kinds except igneous.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Little Bluestem / Bluebunch Wheatgrass / Sideoats Grama / Needleandthread	The potential vegetation is about 75-90% grasses, 10-15% forbs, 0-5% woody plants and 0-5% trees. Mid cool season grasses dominate the community. The principal grasses are little bluestem, bluebunch wheatgrass, western wheatgrass, sideoats grama and needleandthread. Bluebunch wheatgrass is found in Wyoming. Secondary grasses are blue grama and Indian ricegrass. Threadleaf sedge occurs as an understory. Dominant forbs and shrubs include prairie clovers, dotted gayfeather, fringed sagewort, hairy goldaster, buckwheats, scarlet globemallow, true mountain mahogany, antelope bitterbrush, yucca and pricklypear cactus. Rocky Mountain juniper, ponderosa pine and skunkbush sumac are found in rock outcrop areas.	600	0.16	0.20
Needleandthread / Threadleaf Sedge / Remnant Mid-Grasses	The dominant grasses include needleandthread and threadleaf sedge. Remnant amounts of little bluestem, bluebunch wheatgrass, sideoats grama and western wheatgrass are still present. Significant forbs include heath aster, hairy goldaster, western ragweed, fringed sagewort and scarlet globemallow. Yucca, broom snakeweed, and pricklypear cactus are common.	450	0.12	0.15
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers. Western wheatgrass and needleandthread are dominant; little bluestem and sideoats are common, but in reduced vigor.	550	0.15	0.18
Threadleaf Sedge / Invaders / Bare Ground	Threadleaf sedge dominates this plant community and can develop into a broken sod bound appearance. Other grasses include blue grama, and threeawns. Forbs include fringed sagewort, western ragweed, phlox, sandwort, and hairy goldaster. Yucca and pricklypear cactus are common. Cheatgrass and sixweeks fescue have invaded the site.	300	0.08	0.10



Very Shallow (15-17" Precipitation) – Little Bluestem / Bluebunch Wheatgrass / Sideoats Grama / Needleandthread

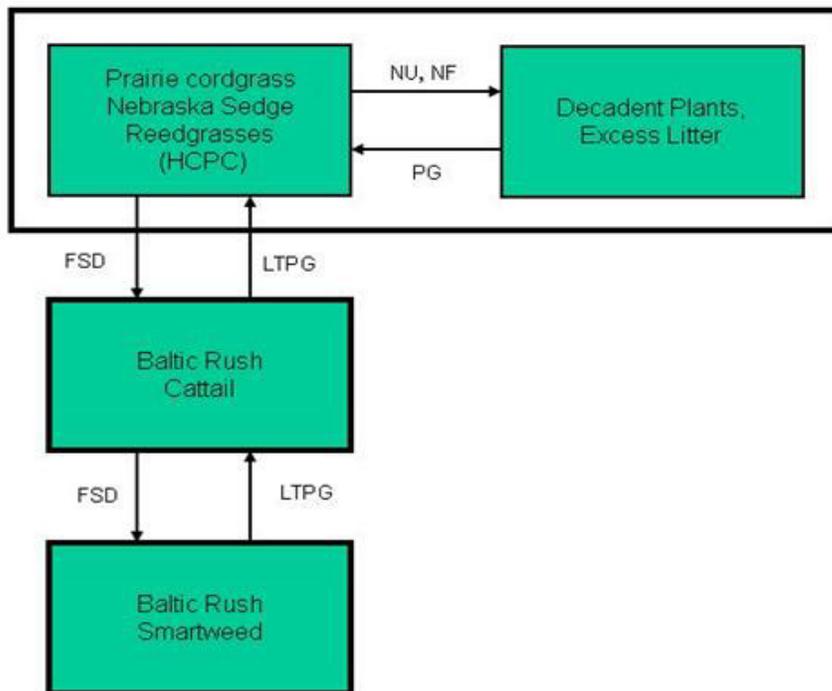
COMMON/GROUP NAME	SCEINTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES & GRASS-LIKES				
Cool Season Grasses			150-300	25-50
Bluebunch Wheatgrass	Pseudoroegneria spicata	PSSP6	0-180	0-30
Indian Ricegrass	Achnatherum hymenoides	ACHY	30-60	5-10
Needleandthread	Hesperostipa comata	HECO26	30-90	5-15
Western Wheatgrass	Pascopyrum smithii	PASM	60-90	10-15
Warm Season Mid-grasses			90-180	15-30
Little Bluestem	Schizachyrium scoparium	SCSC	60-120	10-20
Sideoats Grama	Bouteloua curtipendula	BOCU	30-60	5-10
Blue Grama			30-60	5-10
Blue Grama	Bouteloua gracilis	BOGR2	30-60	5-10
Other Perennial Grasses			30-60	5-10
Plains Muhly	Muhlenbergia cuspidata	MUCU3	0-30	0-5
Plains Reedgrass	Calamagrostis montanensis	CAMO	0-30	0-5
Prairie Junegrass	Koeleria macrantha	KOMA	0-30	0-5
Sandberg Bluegrass	Poa secunda	POSE	0-30	0-5
Threawn	Aristida sp.	ARIST	0-11	0-2
Other Perennial Grasses		2GP	0-30	0-5
Grasslikes			30-60	5-10
Sedge	Carex sp.	CAREX	0-30	0-5
Threadleaf Sedge	Carex filifolia	CAFI	0-30	0-5
FORBS			60-90	10-15
Beardtongue	Penstemon sp.	PENST	0-12	0-2
Buckwheat	Eriogonum sp.	ERIOG	0-12	0-2
Cuman Ragweed	Ambrosia psilostachya	AMPS	0-12	0-2
Dotted Blazing Star	Liatris punctata	LIPU	0-12	0-2
Goldenrod	Solidago sp.	SOLID	0-12	0-2
Hairy False Goldenaster	Heterotheca villosa	HEVI4	0-12	0-2
Milkvetch	Astragalus sp.	ASTRA	0-12	0-2
Phlox	Phlox sp.	PHLOX	0-12	0-2
Prairie Clover	Dalea sp.	DALEA	0-12	0-2
Prairie Sagewort	Artemisia frigida	ARFR4	0-12	0-2
Pussytoes	Antennaria sp.	ANTEN	0-12	0-2
Ragwort	Senecio sp.	SENEC	0-12	0-2
Sandwort	Arenaria sp.	ARENA	0-12	0-2
Scarlet Beeblossom	Gaura coccinea	GACO5	0-12	0-2
Scarlet Globemallow	Sphaeralcea coccinea	SPCO	0-12	0-2
White Heath Aster	Symphotrichum ericoides	SYER	0-12	0-2
Other Perennial Forbs		2FP	0-30	0-5
SHRUBS			0-30	0-5
Alderleaf Mountain Mahogany	Cercocarpus montanus	CEMO2	0-30	0-5
Antelope Bitterbrush	Purshia tridentata	PUTR2	0-12	0-2
Broom Snakeweed	Gutierrezia sarothrae	GUSA2	0-12	0-2
Plains Pricklypear	Opuntia polyacantha	OPPO	0-12	0-2
Skunkbush Sumac	Rhus trilobata	RHTR	0-12	0-2
Soapweed Yucca	Yucca glauca	YUGL	0-12	0-2
Winterfat	Krascheninnikovia lanata	KRLA2	0-12	0-2
Other Shrubs		2SHRUB	0-30	0-5
TREES			0-30	0-5
Ponderosa Pine	Pinus ponderosa var. scopulorum	PIPOS	0-30	0-5
Rocky Mountain Juniper	Juniperus scopulorum	JUSC2	0-30	0-5

Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL:	475	600	725

SITE: WETLAND R067AY178WY

SITE DESCRIPTION: This site normally occurs on level to nearly level bottomlands near springs, seeps and sloughs. This site consists of deep to very deep poorly drained soils formed in alluvium with a water table above the surface for part but not all of the growing season. Depth to water table is 0-12". They are on nearly level to slightly depressed areas with poor surface drainage. In some places the surface layers have a high organic matter content.

Plant Community	Community Description	Average Production #/ac	AUM/AC	
			50% Use	60% Use
Prairie cordgrass / Nebraska sedge / Reed grasses	Potential vegetation is about 45-75% grasses, 20-35% sedges and rushes, 5-10% forbs, and 0-10 trees. The major grasses/grass-likes include prairie cordgrass, Nebraska sedge, bluejoint reedgrass, and northern reedgrass. Grasses/grass-likes of lesser importance are Baltic rush and low-growing, unpalatable sedges.	5500	1.51	1.81
Baltic Rush / Cattail	Baltic rush, cattails and sedges dominate the site. Prairie cordgrass, northern reedgrass, bluejoint reedgrass, and Nebraska sedge may be present.	3000	0.82	0.99
Baltic Rush / Smartweed	Baltic rush, smartweed, and cattails dominate this plant community. American licorice is common.	1800	0.49	0.59
Decadent Plants	Plant litter accumulates in large amounts and eventually crowds out plants and more of the area becomes bare ground. Bunchgrasses develop dead centers. The dominant plants are Nebraska sedge and reed grasses. Weedy species, cool-season grasses, and sedges are common. Prairie cordgrass is a secondary grass. American licorice tends to invade. Noxious weeds such as purple loosestrife may be present.	5000	1.37	1.64



- FSD** - Frequent and Severe Defoliation of the Cool-season Mid-grasses/grasslikes during the Growing Season
- HCPC** - Historic Climax Plant Community
- LTPG** - Long-term Prescribed Grazing
- NU, NF** - No Use and No Fire
- PG** - Prescribed Grazing (proper stocking rates with adequate recovery periods during the growing season)

Wetland — Prairie cordgrass / Nebraska sedge / Reed grasses Plant Community (HCPC)

COMMON/GROUP NAME	SCIENTIFIC NAME	SYMBOL	Lbs/acre	% Composition
GRASSES AND GRASSLIKES				
Reedgrass/Cordgrass			3025-3575	55-65
Bluejoint	Calamagrostis canadensis	CACA4	550-1375	10-25
Northern Reedgrass	Calamagrostis stricta ssp. inexpansa	CAST13	275-825	5-15
Prairie Cordgrass	Spartina pectinata	SPPE	2200-3025	40-55
Other Perennial Grasses			275-550	5-10
Bluegrass	Poa sp.	POA	0-275	0-5
Foxtail Barley	Hordeum jubatum	HOJU	0-275	0-5
Reed Canarygrass	Phalaris arundinacea	PHAR3	0-275	0-5
Slender Wheatgrass	Elymus trachycaulus	ELTR7	0-275	0-5
Other Perennial Grasses		2GP	0-275	0-5
Grasslikes			1100-1925	20-35
Baltic Rush	Juncus balticus	JUBA	0-275	0-5
Bulrush	Scirpus sp.	SCIRP	275-550	5-10
Nebraska Sedge	Carex nebrascensis	CANE2	550-1375	10-25
Sedge	Carex sp.	CAREX	275-550	5-10
Spikerush	Eleocharis sp.	ELEOC	0-275	0-5
Rush	Juncus sp.	JUNCU	0-275	0-5
FORBS			275-550	5-10
American Licorice	Glycyrrhiza lepidota	GLLE3	0-110	0-2
Arrowgrass	Triglochin sp.	TRIGL	0-110	0-2
Aster	Aster sp.	ASTER	0-110	0-2
Blue-eyed Grass	Sisyrinchium sp.	SISYR	0-110	0-2
Broadleaf Cattail	Typha latifolia	TYLA	0-110	0-2
Cinquefoil	Potentilla sp.	POTEN	0-110	0-2
Horsetail	Equisetum sp.	EQUIS	0-110	0-2
Iris	Iris sp.	IRIS	0-110	0-2
Milkvetch	Astragalus sp.	ASTRA	0-110	0-2
Narrowleaf Cattail	Typha angustifolia	TYAN	0-110	0-2
Pennsylvania Smartweed	Polygonum pensylvanicum	POPE2	0-110	0-2
Poison Hemlock	Conium maculatum	COMA2	0-110	0-2
Swamp Smartweed	Polygonum hydropiperoides	POHY2	0-110	0-2
Textile Onion	Allium textile	ALTE	0-110	0-2
Virginia Strawberry	Fragaria virginiana	FRVI	0-110	0-2
Water Hemlock	Cicuta sp.	CICUT	0-110	0-2
Other Perennial Forbs		2FP	0-275	0-5
SHRUBS			0-550	0-10
Willow	Salix sp.	SALIX	0-550	0-10

Annual Production lbs./acre	LOW	RV*	HIGH
TOTAL	5000	5500	6000

MLRA 67A PLANT LIST

(The following plants are listed in the MLRA-67A plant tables. This is not a complete list of all plants that may be found in the MLRA.)

Grasses		
<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>
Alkali Bluegrass	<i>Poa secunda</i>	<i>Sandberg Bluegrass</i>
Alkali Cordgrass	<i>Spartina gracilis</i>	
Alkali Sacaton	<i>Sporobolus airoides</i>	
Big Bluestem	<i>Andropogon gerardii</i>	
Blowout Grass	<i>Refieldia flexuosa</i>	
Bluebunch Wheatgrass	<i>Pseudoroegneria spicata</i>	
Blue Grama	<i>Bouteloua gracilis</i>	
Bluegrass	<i>Poa sp.</i>	
Bluejoint	<i>Calamagrostis canadensis</i>	<i>Bluejoint Reedgrass</i>
Buffalograss	<i>Bouteloua dactyloides</i>	
Canada Wildrye	<i>Elymus canadensis</i>	
Fendler Threeawn	<i>Aristida purpurea</i> var. <i>longiseta</i>	<i>Red Threeawn</i>
Foxtail Barley	<i>Hordeum jubatum</i>	
Green Needlegrass	<i>Nassella viridula</i>	
Hairy Grama	<i>Bouteloua hirsuta</i>	
Indian Ricegrass	<i>Achnatherum hymenoides</i>	
Inland Saltgrass	<i>Distichlis spicata</i>	
Mulhy	<i>Muhlenbergia sp.</i>	
Needleandthread	<i>Hesperostipa comata</i>	
Northern Reedgrass	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	
Little Bluestem	<i>Schizachyrium scoparium</i>	
Nuttall's alkaligrass	<i>Puccinellia nuttalliana</i>	
Plains Bluegrass	<i>Poa arida</i>	
Plains Muhly	<i>Muhlenbergia cuspidata</i>	
Plains Reedgrass	<i>Calamagrostis montanensis</i>	
Prairie Cordgrass	<i>Spartina pectinata</i>	
Prairie Junegrass	<i>Koeleria macrantha</i>	
Prairie Sandreed	<i>Calamovilfa longifolia</i>	
Reed Canarygrass	<i>Phalaris arundinacea</i>	
Rosette Grass	<i>Dichanthelium sp.</i>	
Sandberg Bluegrass	<i>Poa secunda</i>	<i>Alkali Bluegrass</i>
Sand Bluestem	<i>Andropogon hallii</i>	
Sand Dropseed	<i>Sporobolus cryptandrus</i>	
Sandhill Muhly	<i>Muhlenbergia pungens</i>	
Sand Lovegrass	<i>Eragrostis tricores</i>	
Scratchgrass	<i>Muhlenbergia asperifolia</i>	
Sideoats Grama	<i>Bouteloua curtipendula</i>	
Slender Wheatgrass	<i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i>	
Switchgrass	<i>Panicum virgatum</i>	
Streambank Wheatgrass	<i>Elymus lanceolatus</i> var. <i>lanceolatus</i> ssp. <i>lanceolatus</i>	<i>Thickspike Wheatgrass</i>
Thin Paspalum	<i>Paspalum setaceum</i>	<i>Sand Paspalum</i>
Threeawn	<i>Aristida sp.</i>	
Western Wheatgrass	<i>Pascopyrum smithii</i>	
Grass-Likes		
<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>

Baltic Rush	Juncus balticus	<i>Mountain Rush</i>
Bulrush	Scirpus sp.	
Nebraska Sedge	Carex nebrascensis	
Needleleaf Sedge	Carex duriuscula	
Sedge	Carex sp.	
Rush	Juncus sp.	
Spikerush	Elochris spp.	
Threadleaf Sedge	Carex filifolia	

FORBS

<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>
American Licorice	Glycyrrhiza lepidota	<i>Wild licorice</i>
American Vetch	Vicia americana	<i>American Deer Vetch, Stiff-leaf vetch</i>
Arrowgrass	Triglochin sp.	
Aster	Aster sp.	
Beardtongue	Penstemon sp.	
Blue-eyed Grass	Sisyrinchium sp.	
Black Samson Echinacea	Echinacea angustifolia	<i>Purple Coneflower</i>
Broadleaf Cattail	Typha latifolia	
Buckwheat	Eriogonum sp.	
Buffalobur nightshade	Solanum rostratum	
Bush Morning Glory	Ipomea leptophylla	
Chalk Hill Hymenopappus	Hymenopappus tenuifolius	
Cinquefoil	Potentilla sp.	
Common Yarrow	Achillea millefolium	<i>Western Yarrow</i>
Cuman Ragweed	Ambrosia psilostachya	<i>Western Ragweed</i>
Curlycup Gumweed	Grindelia squarrosa	
Death Camas	Zigadenus venenosus	
Desert Parsley	Lomatium sp.	
Dotted Blazing Star	Liatris punctata	<i>Dotted Gayfeather</i>
Evening Primrose	Oenothera sp.	
False Boneset	Brickellia eupatorioides	
Field Sagewort	Artemisia campestris	
Flaxflowered Ipomopsis	Ipomopsis longiflora	
Greenthread	Thelesperma sp.	
Goldenrod	Solidago sp.	
Helianthella	Helianthella sp.	
Hairy False Goldenaster	Heterotheca villosa	<i>Hairy Goldaster, Golden Aster</i>
Horsetail	Equisetum sp.	
Indian Breadroot	Pediomelum sp.	
Iris	Iris sp.	
Ironweed	Vernonia sp.	
Lemon Scurfpea	Psoralidium lanceolatum	
Larkspur	Delphinium sp.	
Meadow Deathcamas	Zigadenus venenosus	
Maximilian Sunflower	Helianthus maximiliani	
Milkvetch	Astragalus sp.	
Nailwort	Paronychia sp.	
Narrowleaf Cattail	Typha angustifolia	

FORBS (Continued)

<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>
Pennsylvania Smartweed	Polygonum pensylvanicum	

Phlox	Phlox sp.	
Poison Hemlock	Conium maculatum	
Prairie Clover	Dalea sp.	
Prairie sagewort	Artemisia frigida	<i>Fringed Sagewort</i>
Purple Locoweed	Oxytropis lambertii	<i>Lambert's Crazyweed</i>
Pursh Seepweed	Suaeda calceoliformis	
Pussytoes	Antennaria sp.	
Ragwort	Senecio sp.	
Rush Skeletonplant	Lygodesmia juncea	
Sanddune Wallflower	Erysimum capitatum	
Sandwort	Arenaria sp.	
Scarlet Beeblossom	Gaura coccinea	<i>Scarlet Gaura</i>
Scarlet Globe Mallow	Sphaeralcea coccinea	
Scurfpea	Psoralegium sp.	
Silky Prairie Clover	Dalea vilosa	
Slimflower Scurfpea	Psoralegium tenuiflorum	<i>Wild Alfalfa</i>
Spiderwort	Tradescantia sp.	
Spreading Buckwheat	Eriogonum effusum	
Stiff Sunflower	Helianthus pauciflorus	
Swamp Smartweed	Polygonum hydropiperoides	
Tenpetal Blazingstar	Mentzelia decapetala	<i>Tenpetal Mentzelia, Stickleaf</i>
Textile Onion	Allium textile	
Upright Prairie Coneflower	Ratibida columnifera	
Veiny Dock	Rumex venosus	
Violet Prairie Clover	Dalea purpurea var. purpurea	<i>Purple Prairie Clover</i>
Virginia Strawberry	Fragaria virginiana	
Water Hemlock	Cicuta sp.	
White Heath Aster	Symphotrichum ericoides var. ericoides	
White Prairie Clover	Dalea candida	
White Sagebrush	Artemisia ludoviciana	<i>Cudweed Sagewort, Louisiana Sagewort</i>
SHRUBS & TREES		
<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>
Alder Leaf Mountain Mahogany	Cercocarpus montanus	
Antelope Bitterbrush	Purshia tridentata	
Big Sagebrush	Artemisia tridentata	
Boxelder	Acer negundo	
Brittle Cactus	Opuntia fragilis	
Broom Snakeweed	Gutierrezia sarothrae	
Fourwing Saltbush	Atriplex canescens	
Gardner's Saltbush	Atriplex gardneri	
Greasewood	Sarcobatus vermiculatus	
Green Ash	Fraxinus pennsylvanica	
Leadplant	Amorpha canescens	
Plains Cottonwood	Populus deltoids ssp. monilifera	
Plains Prickly pear	Opuntia polyantha	
Ponderosa Pine	Pinus ponderosa var. scopulorum	
Prairie Rose	Rosa arkansana	<i>Arkansas Rose</i>
Rubber Rabbitbrush	Ericameria nauseosa	
SHRUBS & TREES (Continued)		
<i>Common Name</i>	<i>Scientific Name</i>	<i>Other Common Names</i>
Rocky Mountain Juniper	Juniperus scopulorum	
Sand Sagebrush	Artemesia filifolia	

Silver Buffaloberry	Shepherdia argentea	
Silverscale Saltbush	Atriplex argentea	
Skunkbush Sumac	Rhus trilobata	
Small Soapweed	Yucca glauca	<i>Soapweed Yucca</i>
Silver Sagebrush	Artemisia cana	
Spiny Star	Escobaria vivipara var. vivipara	Pin Cushion Cactus
Spreading Buckwheat	Eriogonum effusum	
Western Sandcherry	Prunus pumila var. besseyi	
Western Snowberry	Symphoricarpos occidentalis	
Willow	Salix sp.	
Winterfat	Krascheninnikovia lanata	
Yellow Rabbitbrush	Chrysothamnus viscidiflorus	