

SUITABILITY GROUP A-1

(Loamy Bottomland)

Description: Deep, well drained or moderately well drained soils with loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas. (Soils with a clayey subsoil have at least 14 inches of loamy material above the subsoil.)

Limitations: Soils in this subgroup can have slight wetness and slight salinity or alkalinity.

Soils: Alluvial land
Kennebec silt loam
Mason silt loam, complex
Radley silt loam
Reading silt loam
Secesh silt loam
Verdigris silt loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BERMUDAGRASS	7S	8S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	7S	8S	9	4	2-3				5.5-8.0	FAIR
MIDLAND	7S	8S	9	5	2-3				5.5-8.0	FAIR
BIG BLUESTEM	9	9	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	9	9	6	7	2-3					FAIR-GOOD
ROUNDTREE	8	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	9	9	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
OSAGE	9	9	6	7	1-3					FAIR
RUNSEY	7	7	6	7	1-3					FAIR
SWITCHGRASS	8	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	8	8	6	5	1-2					GOOD
CAVE-IN-ROCK	8	8	7	5	1-2					GOOD
KANLOW	7	7	8	4	1-2					POOR
COOL SEASON GRASSES										
ORCHARDGRASS	6	8	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	6	8	7	7	1-2					POOR
REED CANARYGRASS	5	7	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IGREED	5	7	8	6	1-2					POOR
RISE	4	6	8	6	1-2					POOR
SMOOTH BROMEGRASS	8	9	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	8	9	7	7	1					FAIR
LINCOLN	8	8	7	7	1					FAIR
SOUTHLAND	8	9	7	7	1					FAIR
FALL FESCUE	9	9	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	8	9	7	4	1					POOR
KENTUCKY 31	9	9	7	4	1					POOR
MISSOURI 96	8	9	7	4	1					POOR
WHEATGRASS										
WESTERN	7	7	4	5	1-3	0-1	0-	0-1	6.5-8.5	GOOD
BARTON	7	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	8	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	7	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDSFOOT TREFOIL	6	8	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWNVELTCH	8	8	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	8	8	8	5	1-3					FAIR
RED CLOVER	6	7	6	8	1	0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	7	8	7	7	1	0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-2

(Loamy)

Description: Deep, well drained or moderately well drained soils with loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on uplands and receive little or no extra moisture from adjoining areas. (Soils with a clayey subsoil have at least 14 inches of loamy material above the subsoil.)

Limitations: Few or no limitations. Soils in this subgroup can have slight wetness and slight salinity or alkalinity.

Soils: Apperson silty clay loam
Deepwater silt loam
Dennis silt loam, silty clay loam, complex
Elmont silt loam, complex
Lula silt loam, complex
Newtonia silt loam
Okemah silt loam
Polo silt loam
Prue fine sandy loam
Summit complex, silty clay loam
Tamaha silt loam
Welda silt loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			Ph RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BERMUDAGRASS	6S	7S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6S	7S	9	4	2-3					FAIR
MIDLAND	6S	7S	9	5	2-3					FAIR
BIG BLUESTEM	8	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	8	8	6	7	2-3					FAIR-GOOD
ROUNTREE	7	7	6	7	2-3					FAIR-GOOD
EASTERN BAMA GRASS	6	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIAN GRASS	8	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	7	7	6	7	1-3					FAIR
OSAGE	8	8	6	7	1-3					FAIR
RUMSEY	8	8	6	7	1-3					FAIR
SWITCHGRASS	8	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	8	8	6	5	1-2					GOOD
CAVE-IN-ROCK	7	7	7	5	1-2					GOOD
COOL SEASON GRASSES										
ORCHARDGRASS	6	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAH	6	7	7	7	1-2					POOR
RED CANARYGRASS	0	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	0	6	8	6	1-2					POOR
RISE	0	6	8	6	1-2					POOR
SMOOTH BROMEGRASS	7	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	7	8	7	7	1					FAIR
LINCOLN	6	8	7	7	1					FAIR
SOUTHLAND	7	8	7	7	1					FAIR
TALL FESCUE	8	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	8	8	7	4	1					POOR
KENTUCKY 31	8	8	7	4						POOR
MISSOURI 96	8	8	7	4						POOR
WHEATGRASS										
WESTERN	7	7	4	5	1-3	0-1	0-1	0	6.5-8.5	GOOD
BARTON	7	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	7	8	10	8		0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	6	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDFOOT TREFOIL	5	7	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWN VETCH	7	7	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	7	7	8	5	1-3					FAIR
RED CLOVER	6	7	6	8	1	0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	6	7	7	7		0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-3

(Coarse Loamy Bottomlands

Description: Deep, well drained or moderately well drained soils with loamy surfaces and subsoils. Soils in this subgroup have moderately coarse-textured surfaces, occur on lowlands, and may receive extra moisture from adjoining areas.

Limitations: Lack of moisture and soil blowing may be hazards during establishment of pasture.

Soils: Cleora fine sandy loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			Ph RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BERMUDAGRASS	7S	8S	9	5	2-3	-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	7S	8S	9	4	2-3					FAIR
MIDLAND	7S	8S	9	5	2-3					FAIR
BIG BLUESTEM	9	9	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	9	9	6	7	2-3					FAIR-GOOD
ROUNDTREE	8	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	9	9	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
USAGE	9	9	6	7	1-3					FAIR
RUMSEY	7	7	6	7	1-3					FAIR
SWITCHGRASS	8	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	8	8	6	5	1-2					GOOD
CAVE-IN-ROCK	8	8	7	5	1-2					GOOD
KANLON	7	7	8	4	1-2					POOR
COOL SEASON GRASSES										
ORCHARDGRASS	7	8	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	7	8	7	7	1-2					POOR
REED CANARYGRASS	5	7	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IGREED	5	7	8	6	1-2					POOR
RISE	4	6	8	6	1-2					POOR
SMOOTH BROMEGRASS	9	9	6	7	1	.2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	9	9	7	7	1					FAIR
LINCOLN	8	8	7	7	1					FAIR
SOUTHLAND	9	9	7	7	1					FAIR
TALL FESCUE	9	9	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	9	9	7	4	1					POOR
KENTUCKY 31	9	9	7	4	1					POOR
MISSOURI 96	9	9	7	4	1					POOR
WHEATGRASS										
WESTERN	7	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	8	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	7	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDSFOOT TREFOIL	6	8	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWNVELTCH	8	8	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	8	8	8	5	1-3					FAIR
RED CLOVER	6	7	6	8	1	0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	7	8	7	7	1	0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8. (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP B-1

(Skeletal)

Description: Deep, well drained soils with loamy surfaces with coarse fragments and loamy to clayey subsoils containing high amounts of coarse fragments. Soils of this group occur on a wide range of slopes and topography and receive little or no extra moisture from adjoining areas.

Limitations: Soils in this group have low available water capacity because they are skeletal or fragmental.

Soils: Clarksville very cherty silt loam
Nixa cherty silt loam
Nowata silt loam
Olpe gravelly silt loam, complex

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	7	7	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	7	7	6	7	2-3					FAIR-GOOD
ROUNTREE	6	5	6	7	2-3					FAIR-GOOD
INDIANGRASS	7	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	6	6	7	1-3					FAIR
OSAGE	7	7	6	7	1-3					FAIR
RUNSEY	7	7	5	7	1-3					FAIR
SWITCHGRASS	7	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	7	6	5	1-2					GOOD
CAVE-IN-ROCK	6	6	7	5	1-2					GOOD
COOL SEASON GRASSES										
SMOOTH BROMEGRASS	6	7	6	7	1	2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	6	7	7	7						FAIR
LINCOLN	6	7	7	7	1					FAIR
SOUTHLAND	6	7	7	7	1					FAIR
TALL FESCUE	7	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	7	7	7	4	1					POOR
KENTUCKY 31	7	7	7	4	1					POOR
MISSOURI 96	7	7	7	4	1					POOR
WHEATGRASS										
WESTERN	6	6	4	5	1-3	0	0-1	0-1	6.5-8.5	GOOD
BARTON	6	6	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	6	7	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	5	6	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDSEED TREFOIL	4	6	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWNVECH	6	6	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	6	6	8	5	1-3					FAIR
RED CLOVER	5	6	6	8	1	0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	5	6	7	7		0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP C-1

(Wet Loamy)

Description: Deep, somewhat poorly or poorly drained soils with loamy surfaces and loamy to clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas.

Limitations: Seasonal wetness during a portion of the growing season.

Soils: Hepler silt loam
Lanton silty clay loam
Leanna silt loam
Mayes silty clay loam
McCune silt loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY		SPECIES PRODUCTIVITY 2/	GRAZING PREFERENCE 3/	STAND ESTABLISHMENT 4/	FERTILIZER NEEDS 5/			Ph RANGE 6/	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BERMUDAGRASS	8S	-	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	8S	-	9	4	2-3					FAIR
MIDLAND	8S	-	9	5	2-3					FAIR
BIS BLUESTEM	7	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	7	-	6	7	2-3					FAIR-GOOD
ROUNTREE	7	-	6	7	2-3					FAIR-GOOD
EASTERN BANGRASS	9	-	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	7	-	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	-	6	7	1-3					FAIR
OSAGE	7	-	6	7	1-3					FAIR
RUMSEY	7	-	6	7	1-3					FAIR
SWITCHGRASS	8	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	8	-	6	5	1-2					GOOD
CAVE-IN-ROCK	8	-	7	5	1-2					GOOD
KANLOW	8	-	8	4	1-2					POOR
COOL SEASON GRASSES										
CREEPING FOXTAIL	8	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	8	-	7	7	1-2					POOR
ORCHARDBRASS	8	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	8	-	7	7	1-2					POOR
REED CANARYGRASS	8	-	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LOWREED	8	-	8	6	1-2					POOR
RISE	8	-	8	6	1-2					POOR
TALL FESCUE	8	-	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENNY	8	-	7	4						POOR
KENTUCKY 31	8	-	7	4						POOR
MISSOURI 96	8	-	7	4						POOR
WHEATGRASS										
TALL	7	-	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	7	-	6	4	1-2					FAIR
WESTERN	7	-	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	-	5	5	1-3					GOOD

1/ ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2/ SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3/ GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4/ STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5/ FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6/ Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP C-2

(Wet Clayey)

Description: Deep, very poorly drained soil with clayey surfaces and subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas. The subsoil is very slowly permeable.

Limitations: These soils have a seasonal high water table during the winter and spring but are droughty during the summer.

Soils: Girard silty clay loam
Osage silty clay, silty clay loam, complex

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BERMUDAGRASS	7S	-	9	5	2-3	-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	7S	-	9	4	2-3					FAIR
MIDLAND	7S	-	9	5	2-3					FAIR
BIG BLUESTEM	6	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	5	-	6	7	2-3					FAIR-GOOD
ROUNDREE	6	-	6	7	2-3					FAIR-GOOD
SWITCHGRASS	7	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	-	6	5	1-2					GOOD
CAVE-IN-ROCK	7	-	7	5	1-2					GOOD
KANLOW	7	-	8	4	1-2					POOR
COOL SEASON GRASSES										
DREPPING FOXTAIL	7	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
SARRISON	7	-	7	7	1-2					POOR
ORCHARDGRASS	7	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	7	-	7	7	1-2					POOR
REED CANARYGRASS	7	-	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IGREED	7	-	8	6	1-2					POOR
RISE	7	-	6	6	1-2					POOR
TALL FESCUE	8	-	6	4		1-2	-2	0-2	6.2-7.0	POOR
KENNY	8	-	7	4	1					POOR
KENTUCKY 31	8	-	7	4	1					POOR
MISSOURI 96	8	-	7	4	1					POOR
WHEATGRASS										
TALL	7	-	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	7	-	6	4	1-2					FAIR
WESTERN	7	-	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	-	5	5	1-3					GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 6, (1=POOR, 6=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP E-1

(Shallow)

Description: Shallow, well drained or somewhat excessively drained soils with loamy surfaces and subsoils, over bedrock or other dense unfractured material. Soils in this group are underlain by bedrock at depths less than 20 inches.

Limitations: Shallow root zone and low available water capacity.

Soils: Talihina silty clay loam, complex
Vinland loam, complex

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	7	0	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	7	0	6	7	2-3					FAIR-GOOD
POPLAR	6	0	5	7	2-3					FAIR-GOOD
INDIANGRASS	7	0	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
OSAGE	7	0	6	7	1-3					FAIR
RUMSEY	6	0	6	7	1-3					FAIR
SIDEGRASS GRAMA	8	0	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	8	0	4	5	1-3					GOOD
SWITCHGRASS	7	0	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	0	6	5	1-2					GOOD
CAVE-IN-ROCK	6	0	7	5	1-2					GOOD
COOL SEASON GRASSES										
SMOOTH BROMEGRASS	5	0	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	5	0	7	7	1					FAIR
LINCOLN	4	0	7	7	1					FAIR
SOUTHLAND	5	0	7	7	1					FAIR
TALL FESCUE	3	0	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	3	0	7	4	1					POOR
KENTUCKY 31	3	0	7	4	1					POOR
MISSOURI 96	3	0	7	4	1					POOR
LEGUMES										
ALFALFA (STANDARD)	6	0	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	5	0	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
CROWN VETCH	6	0	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	6	0	8	5	1-3					FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP F-1
(Loamy-Moderately Deep)

Description: Moderately deep, well drained or moderately well drained soils with loamy surfaces and subsoils. Soils in this subgroup occur on uplands and are underlain by bedrock at depths of 20 to 40 inches.

Limitations: Restricted root depth due to bedrock.

Soils: Bates loam, fine sandy loam, complex
Bolivar loam, fine sandy loam, complex
Catoosa silt loam, complex
Clareson silty clay loam, complex
Gerald silt loam
Lebo silty clay loam
Niotaze complex
Sibleyville loam, complex
Stephenville fine sandy loam, complex
Tonti silt loam

Recommended Species: See chart on next page.

SA: 644 & 112
 SUITABILITY GROUP:

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	7	7	5	7	2-3	0-1	0		6.0-7.5	FAIR-GOOD
KAW	7	7	6	7	2-3					FAIR-GOOD
POUNDTREE	6	6	6	7	2-3					FAIR-GOOD
INDIANGRASS	7	7	5	7	1-3	0-1	0		5.5-7.5	FAIR
CHEYENNE	6	6	6	7	1-3					FAIR
OSAGE	7	7	6	7	1-3					FAIR
RUMSEY	7	7	6	7	1-3					FAIR
SWITCHGRASS	7	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	7	6	5	1-2					GOOD
CAVE-IN-ROCK	6	6	7	5	1-2					GOOD
COOL SEASON GRASSES										
SMOOTH BROMEGRASS	6	7	6	7		1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	6	7	7	7						FAIR
LINCOLN	5	7	7	7	1					FAIR
SOUTHLAND	6	7	7	7	1					FAIR
TALL FESCUE	7	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	7	7	7	4						POOR
KENTUCKY 31	7	7	7	4	1					POOR
MISSOURI 96	7	7	7	4	1					POOR
WHEATGRASS										
WESTERN	6	6	4	5	1-3	0-1	0	0-1	6.5-8.5	GOOD
BARTON	6	6	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	6	7	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	5	6	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDFOOT TROFOLL	4	6	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWN VETCH	6	6	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	6	6	8	5	1-3					FAIR
RED CLOVER	5	6	6	8		0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	5	6	7	7		0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATINGS FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATINGS OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP F-2
(Limy-Moderately Deep)

Description: Moderately deep, well drained or moderately well drained soils with loamy surfaces and loamy to clayey subsoils. Soils in this subgroup occur on uplands and have calcareous surface and subsurface layers and are underlain with calcareous bedrock at depths of 20 to 40 inches.

Limitations: Soils in this subgroup are slightly affected by limy surfaces and subsoils and have a restricted root depth.

Soils: Clime complex

Recommended Species: See chart on next page.

LSA: 8A & 112
 SUITABILITY GROUP: F-2

-2-

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			Ph RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	7	0	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	7	0	6	7	2-3					FAIR-GOOD
ROUNDFEE	6	0	6	7	2-3					FAIR-GOOD
INDIANGRASS	7	0	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	7	0	6	7	1-3					FAIR
OSAGE	7	0	6	7	1-3					FAIR
RUMSEY	7	0	6	7	1-3					FAIR
SWITCHGRASS	7	0	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	0	6	5	1-2					GOOD
CAVE-IN-ROCK	6	0	7	5	1-2					GOOD
COOL SEASON GRASSES										
SMOOTH BROMESGRASS	6	0	6	7		1-2	1-2	0-2	5.5-7.0	FAIR
ACKENBACH	6	0	7	7						FAIR
LINCOLN	5	0	7	7						FAIR
SOUTHLAND	6	0	7	7						FAIR
WHEATGRASS										
WESTERN	6	0	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	6	0	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	6	0	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	5	0	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD
BIRDSEED TREFOIL	4	0	8	8	1	0-1	1-3	1-3	6.2-7.0	FAIR
CROWNVEICH	6	0	8	5	1-3	0-1	0-2	1-2	6.5-8.0	FAIR
EMERALD	6	0	8	5	1-3					FAIR
RED CLOVER	5	0	6	8		0-1	1-3	1-3	6.5-8.0	POOR
SWEET CLOVER	5	0	7	7		0-1	0-2	1-2	6.5-8.0	FAIR

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP F-3

(Eroded Clay)

Description: Deep, well drained to somewhat poorly drained, eroded soils with clayey or thin loamy surfaces and clayey subsoils.

Limitations: Stand establishment on these soils is very difficult due to clayey or thin surfaces. Low organic matter will limit fertility and plant production (causing difficult management decisions).

Soils: Dennis silty clay loam, eroded
Eram silty clay loam, eroded
Grundy silty clay loam, eroded
Kenoma silty clay loam, eroded
Ladysmith silty clay loam, eroded
Parsons silt loam, eroded
Pawnee clay loam, eroded; soils, eroded
Summit silty clay loam, eroded; soils, eroded
Woodson silty clay loam, eroded; soils, eroded

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1/		SPECIES PRODUCTIVITY 2/	GRAZING PREFERENCE 3/	STAND ESTABLISHMENT 4/	FERTILIZER NEEDS 5/			PH RANGE 6/	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	6	6	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	6	6	6	7	2-3					FAIR-GOOD
ROUNDTREE	5	5	6	7	2-3					FAIR-GOOD
INDIANGRASS	6	6	5	7	1-3	0-	0	0	5.5-7.5	FAIR
CHEYENNE	5	5	6	7	1-3					FAIR
OSAGE	6	6	6	7	1-3					FAIR
RUMSY	6	6	6	7	1-3					FAIR
SWITCHGRASS	6	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
TALL FESCUE	6	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENNY	6	7	7	4	1					POOR
KENTUCKY 31	6	7	7	4	1					POOR
MISSOURI 96	6	7	7	4	1					POOR
WHEATGRASS										
WESTERN	5	6	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	6	5	5	1-3					GOOD

1/ ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2/ SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3/ GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4/ STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5/ FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6/ PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP F-4

(Clayey)

Description: Deep and moderately deep, well drained to somewhat poorly drained soils with loamy or clayey surfaces and clayey subsoils. (If surface texture is loamy, it is less than 14 inches over dense clayey subsoil.)

Limitations: Slowly or very slowly permeable clayey subsoils.

Soils: Brazelton silty clay loam
Cherokee silt loam
Eram silty clay loam, complex
Kenoma silt loam, complex
Labette silty clay loam
Oska silty clay loam, complex
Parsons silt loam
Ringo silty clay loam, complex
Steedman stony loam
Taloka silt loam
Woodson silt loam
Zaar silty clay loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	7	7	5	7	2-3	0-	0	0	6.0-7.5	FAIR-GOOD
KAW	7	7	6	7	2-3					FAIR-GOOD
ROCKTREE	6	6	6	7	2-3					FAIR-GOOD
INDIANGRASS	7	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	6	6	7	1-3					FAIR
OSAGE	7	7	6	7	1-3					FAIR
RUMSEY	7	7	6	7	1-3					FAIR
SWITCHGRASS	6	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	7	6	5	1-2					GOOD
CAVE-IN-ROCK	5	7	7	5	1-2					GOOD
COOL SEASON GRASSES										
ORCHARDGRASS	5	6	6	7	1-2	1-2	2	0-2	5.5-7.0	POOR
LATAR	5	6	7	7	1-2					POOR
SMOOTH BROMEGRASS	6	7	6	7		1-2	2	0-2	5.5-7.0	FAIR
ACHENBACH	6	7	7	7						FAIR
LINCOLN	5	7	7	7						FAIR
SOUTHLAND	6	7	7	7						FAIR
TALL FESCUE	7	7	6	4		1-2	2	0-2	6.2-7.0	POOR
KENNY	7	7	7	4						POOR
KENTUCKY 31	7	7	7	4	1					POOR
MISSOURI 96	7	7	7	4	1					POOR
WHEATGRASS										
WESTERN	6	6	4	5	1-3	0-	0-	0-1	6.5-8.5	GOOD
BARTON	6	6	5	5	1-3					GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOXY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP H

(Not Suitable)

Description: This group includes various textures and phases of soils and land types which occur on a wide range of slopes and topography.

Limitations: Soils in this group are generally too shallow, erosive, gravelly, stony, or rocky; too steep, droughty, wet, clayey, or saline and alkaline for good survival or growth of pasture species.

Soils: Basehor stony, fine sandy loam
Collinsville fine sandy loam, complex
Clareson stony, silty clay loam
Darnell soils, complex
Gravelly land
Gullied land
Hector fine sandy loam, complex
Lebo channery silty clay loam
Orthents
Shidler stony silt loam
Sogn complex
Steedman stony, loam, clay loam

Recommended Species: See Standards and Specifications for Critical Area Planting (342).