

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
Bridgeport loam, fine sandy loam

Recommended Species: See chart on next page.

LRA: 77
 SUITABILITY GROUP: A-1

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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	5	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	5	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	0	9	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	5	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	8	6	7	1-3					FAIR
SIDE-OATS GRAMA	6	8	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	8	4	5	1-3					GOOD
SWITCHGRASS	6	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	4	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	4	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
REED 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	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	3	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	3	8	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	3	8	7	7	1					FAIR
TALL FESCUE	0	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	4	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	4	7	6	4	1-2					FAIR
TALL	5	8	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	5	8	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 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 group can have slight wetness and slight salinity or alkalinity.

Soils: Richfield loam, silt loam, fine sandy loam, loamy fine sand
Satanta loam, fine sandy loam
Ulysses loam, silt loam, complex

Recommended Species: See chart on next page.

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SUITABILITY GROUP: A-2

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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	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	4	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	0	7	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
SIDEOTS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	5	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	3	6	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REBAR	3	6	7	6	1-2					FAIR
ORCHARDGRASS	0	6	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	6	7	7	1-2					POOR
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IDREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	0	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	7	7	7	1					FAIR
LINCOLN	0	5	7	7	1					FAIR
SOUTHLAND	0	7	7	7	1					FAIR
TALL FESCUE	0	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	3	6	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	3	6	6	4	1-2					FAIR
TALL	3	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	3	7	6	4	1-2					FAIR
WESTERN	4	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 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:** Las Animas sandy loam, soils

Recommended Species: See chart on next page.

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SUITABILITY GROUP: A-3

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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	5	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	5	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	0	9	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	5	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	8	6	7	1-3					FAIR
SAND BLUESTEM	5	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SIDEOTS GRAMA	6	8	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	8	4	5	1-3					GOOD
SWITCHGRASS	6	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	4	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	4	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
REED CANARYGRASS	0	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IDREED	0	6	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	3	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	3	8	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	3	8	7	7	1					FAIR
TALL FESCUE	0	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	4	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	4	7	6	4	1-2					FAIR
TALL	5	8	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	5	8	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 A-4

(Sands)

Description: Deep, well drained to excessively drained soils with sandy surfaces and subsoils. Available water holding capacity in the 40-inch root zone is less than four inches.

Limitations: Choice of plants is limited by droughtiness and low fertility. Lack of moisture and soil blowing may be a hazard during establishment of recommended species.

Soils: Likes loamy sand
Tivoli loamy fine sand 1/
Vona loamy fine sand; loamy fine sand, eroded

1/ Suitable only when irrigated.

Recommended Species: See chart on next page.

LRA: 77
SUITABILITY GROUP: A-4

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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	4	7	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAM	4	7	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	0	7	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	5	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	8	6	7	1-3					FAIR
PRAIRIE SANDREED	5	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	5	8	6	3	2-3					GOOD
SAND BLUESTEM	5	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SIDEHATS GRAMA	4	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	4	7	4	5	1-3					GOOD
SWITCHGRASS	5	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	0	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	0	5	7	7	1-2					POOR
MEADOW BROMEGRASS	0	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REBAR	0	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	7	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	0	7	7	7	1					FAIR
TALL FESCUE	0	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	0	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	0	7	6	4	1-2					FAIR
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 A-6

(Coarse Loamy Upland)

Description: Deep, well drained soils with loamy surfaces and subsoils
Soils in this subgroup have moderately coarse-textured
surfaces and occur on uplands.

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

Soils: Bayard fine sandy loam
Dalhart fine sandy loam
Manter fine sandy loam, complex; fine sandy loam, eroded
Otero fine sandy loam, complex

Recommended Species: See chart on next page.

LRA: 77
SUITABILITY GROUP: A-6

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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	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	4	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	0	7	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
SAND BLUESTEM	4	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	4	8	6	7	1-3					FAIR-GOOD
SIDEOTS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	5	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	3	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	3	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IDREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	0	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	8	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	0	8	7	7	1					FAIR
TALL FESCUE	0	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	8	7	4						POOR
WHEATGRASS										
INTERMEDIATE	3	6	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	3	6	6	4	1-2					FAIR
TALL	3	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	3	7	6	4	1-2					FAIR
WESTERN	4	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 A-7

(Deep Limy)

Description: Deep, well drained or somewhat excessively drained soils with loamy surfaces and subsoils that contain lime throughout the profile.

Limitations: Soils in this subgroup are slightly affected by limy surfaces and subsoils.

Soils: Colby loam, soils, complex
Mansic clay loam, soils, complex
Mansker soils
Ulysses 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	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	4	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
SIDEOTS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	4	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	4	7	6	5	1-2					GOOD
COD. SEASON GRASSES										
MEADOW BROMEGRASS	2	5	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	2	5	7	6	1-2					FAIR
ORCHARDGRASS	0	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	5	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	5	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	5	7	7	1					FAIR
LINCOLN	0	4	7	7	1					FAIR
SOUTHLAND	0	5	7	7	1					FAIR
TALL FESCUE	0	5	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	5	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	2	5	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	2	5	6	4	1-2					FAIR
TALL	4	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	4	7	6	4	1-2					FAIR
WESTERN	4	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	7	5	5	1-3					GOOD
LEGUMES										
R.FALFA (STANDARD)	0	7	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	6	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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 A-9

(Sandy Bottomland)

Description: Deep, well drained or excessively drained soils with sandy surfaces and subsoils. Soils in this subgroup have sandy surfaces and occur on bottomlands and receive extra water from upland drainage.

Limitations: Choice of plants is limited by droughtiness and low fertility. Soil blowing may be extremely hazardous during establishment and early growth.

Soils: Lincoln soils

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										
EASTERN BANGRASS	0	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	4	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	4	7	6	7	1-3					FAIR
PRAIRIE SANDREED	5	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	5	8	6	3	2-3					GOOD
SAND BLUESTEM	5	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	5	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	0	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REBAR	0	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	7	7	7	1					FAIR
LINCOLN	0	6	7	7						FAIR
SOUTHLAND	0	7	7	7						FAIR
TALL FESCUE	0	7	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	0	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	0	7	6	4	1-2					FAIR
WESTERN	4	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	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-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: Wann 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	4	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	4	-	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	6	-	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	4	-	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	-	6	7	1-3					FAIR
SWITCHGRASS	6	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	-	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	4		6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	4		7	7	1-2					POOR
ORCHARDGRASS	4		6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	4		7	7	1-2					POOR
REED CANARYGRASS	4		7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	4		8	6	1-2					POOR
RISE	4		8	6	1-2					POOR
TALL FESCUE	3		6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3		7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	5		5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	5		6	4	1-2					FAIR
FALL	6		5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6		6	4	1-2					FAIR
WESTERN	6		4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	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 C-3

(Subirrigated)

Description: Deep, somewhat poorly drained and poorly drained soils with loamy surfaces and subsoils. Surface and subsoil textures range from loamy sands to silty clay loams. A permanent water table is normally present from one to five feet below the surface.

Limitations: Soil saturation within the root zone restricts species selection. Wetness during the optimum seeding periods can hinder establishment. Water is at or near the surface during the winter and spring.

Soils: Kanza soils

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	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	7	-	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8	-	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	6	-	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	-	6	7	1-3					FAIR
SWITCHGRASS	7	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	-	6	5	1-2					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 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: Blowout land
Gravelly broken land
Lofton clay loam, fine sandy loam
Otero gravelly complex
Potter soils, complex
Rough broken land
Tivoli fine sand

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