

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
Brewer silty clay loam, complex
Broken alluvial land
Dale silt loam
Elandco silt loam, silty clay loam, complex
Kaski loam
McClain silt loam
Port clay loam, silt loam, complex
Reinach silt loam
Ustifluvents

Recommended Species: See chart on next page.

LRA: 80A
 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										
BERMUDAGRASS	6	8	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6	8	9	4	2-3				5.5-8.0	FAIR
MIDLAND	6	8	9	5	2-3				5.5-8.0	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
EASTERN PANAGRASS	8	9	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	8	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	8	8	6	7	1-3					FAIR
OSAGE	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
COOL SEASON GRASSES										
ORCHARDGRASS	4	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	4	7	7	7	1-2					POOR
REED CANARYGRASS	4	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
TOREED	4	6	8	6	1-2					POOR
RISE	3	5	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	7	7	7	1					FAIR
SOUTHLAND	7	8	7	7	1					FAIR
TALL FESCUE	4	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	4	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	6	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	6	7	6	4	1-2					FAIR
TALL	6	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6	7	6	4	1-2					FAIR
WESTERN	7	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	7	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	6	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 subgroup can have slight wetness and slight salinity or alkalinity.

Soils: Corbin silt loam
Farnum loam, clay loam, sandy loam, fine sandy loam, complex
Grant silt loam
Milan loam, clay loam, fine sandy loam
Minco silt loam
Norge loam, silt loam, silty clay loam
Ost clay loam, complex
Pond Creek silt loam, silty clay loam
Ruella loam, clay loam, complex
Shellabarger sandy loam, fine sandy loam, loamy sand,
loamy fine sand, complex
Vanoss silt loam

Recommended Species: See chart on next page

LRA: 80A
 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										
BERMUDAGRASS	4	7	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	4	7	9	4	2-3					FAIR
MIDLAND	4	7	9	5	2-3					FAIR
BIG BLUESTEM	7	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	7	8	6	7	2-3					FAIR-GOOD
EASTERN BAMA GRASS	3	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIAN GRASS	7	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	7	8	6	7	1-3					FAIR
OSAGE	7	8	6	7	1-3					FAIR
SWITCHGRASS	7	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
ORCHARD GRASS	4	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	4	7	7	7	1-2					POOR
REED CANARY GRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LOREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROME GRASS	5	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	5	7	7	7	1					FAIR
LINCOLN	5	7	7	7	1					FAIR
SOUTHLAND	5	7	7	7	1					FAIR
TALL FESCUE	4	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	4	8	7	4	1					POOR
WHEAT GRASS										
INTERMEDIATE	6	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	6	7	6	4	1-2					FAIR
TALL	6	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6	7	6	4	1-2					FAIR
WESTERN	7	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	8	10	8		0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	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: Canadian sandy loam, fine sandy loam, complex
Crisfield sandy loam, fine sandy loam
Gerlane fine sandy loam
Zavala 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	6	8	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6	8	9	4	2-3					FAIR
MIDLAND	6	8	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
EASTERN BANGRASS	8	9	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	8	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	8	8	6	7	1-3					FAIR
OSAGE	8	8	6	7	1-3					FAIR
SAND BLUESTEM	7	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	7	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	8	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	8	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
ORCHARDGRASS	4	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	4	7	7	7	1-2					POOR
REED CANARYGRASS	4	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	4	6	8	6	1-2					POOR
RISE	3	5	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	7	7	7	1					FAIR
SOUTHLAND	7	8	7	7	1					FAIR
TALL FESCUE	5	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	5	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	6	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	6	7	6	4	1-2					FAIR
TALL	6	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6	7	6	4	1-2					FAIR
WESTERN	7	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	7	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	6	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: Pratt loamy fine sand, complex
Tivoli fine sand, complex, loamy fine sands 1/

1/ Suitable only when irrigated

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	5	7	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	5	7	9	4	2-3					FAIR
MIDLAND	5	7	9	5	2-3					FAIR
BIG BLUESTEM	6	7	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	6	7	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	4	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	6	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	7	6	7	1-3					FAIR
OSAGE	6	7	6	7	1-3					FAIR
PRAIRIE SANDREED	7	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
BOSHEN	7	8	6	3	2-3					GOOD
SAND BLUESTEM	8	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	8	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	7	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	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
ORCHARDBASS	3	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	3	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	5	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	5	7	7	7	1					FAIR
LINCOLN	5	7	7	7	1					FAIR
SOUTHLAND	5	7	7	7	1					FAIR
TALL FESCUE	3	7	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3	7	7	4						POOR
LEGUMES										
ALFALFA (STANDARD)	4	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	3	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:** Albion sandy loam, complex
Attica fine sandy loam, loamy fine sand
Naron 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	4	7	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	4	7	9	4	2-3					FAIR
MIDLAND	4	7	9	5	2-3					FAIR
BIG BLUESTEM	7	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	7	8	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	3	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	7	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	7	8	6	7	1-3					FAIR
OSAGE	7	8	6	7	1-3					FAIR
SAND BLUESTEM	7	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	7	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	7	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
ORCHARDGRASS	4	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAH	4	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
IDAED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SACOTH BROMEGRASS	5	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	5	8	7	7	1					FAIR
LINCOLN	5	8	7	7						FAIR
SOUTHLAND	5	8	7	7	1					FAIR
TALL FESCUE	4	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	4	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	6	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	6	7	6	4	1-2					FAIR
TALL	6	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6	7	6	4	1-2					FAIR
WESTERN	7	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RIZOMATOUS)	4	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: Case clay loam, complex
Clark clay loam, fine sandy 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	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	7	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	6	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	7	6	7	1-3					FAIR
USAGE	6	7	6	7	1-3					FAIR
SIDEGRASS GRAMA	8	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	8	7	4	5	1-3					GOOD
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										
ORCHARDGRASS	3	6	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	3	6	7	7	1-2					POOR
SMOOTH BROMEGRASS	4	6	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	4	6	7	7	1					FAIR
LINCOLN	4	6	7	7	1					FAIR
SOUTHLAND	4	6	7	7						FAIR
TALL FESCUE	2	5	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	2	5	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	5	6	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	5	6	6	4	1-2					FAIR
TALL	6	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	6	7	6	4	1-2					FAIR
WESTERN	7	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	4	7	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	3	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.

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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 loamy sand, soils, 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	5	7	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	5	7	9	4	2-3					FAIR
MIDLAND	5	7	9	5	2-3					FAIR
BIG BLUESTEM	6	7	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	6	7	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	5	8	10	8	2-4	0-3	0-2	0-1	5.5-7.5	FAIR
INDIANGRASS	6	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	6	7	6	7	1-3					FAIR
OSAGE	6	7	6	7	1-3					FAIR
PRAIRIE SANDREED	7	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
SOSSEN	7	8	6	3	2-3					GOOD
SAND BLUESTEM	8	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	8	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	7	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	7	7	6	5	1-2					GOOD
CDDL SEASON GRASSES										
ORCHARDGRASS	3	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	3	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	5	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	5	7	7	7	1					FAIR
LINCOLN	5	7	7	7	1					FAIR
SOUTHLAND	5	7	7	7	1					FAIR
TALL FESCUE	3	7	6	4	1	-2	-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3	7	7	4	1					POOR
WHEATGRASS										
WESTERN	5	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	6	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	8	10	8		0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	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.

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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: Lesho loam, clay loam
Waldeck sandy loam, fine sandy loam
Zenda clay loam, 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	6	-	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
ARDIE	6	-	9	4	2-3					FAIR
MIDLAND	6	-	9	5	2-3					FAIR
BIG BLUESTEM	5	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	5	-	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	5	-	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	-	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
KANLAW	6	-	8	4	1-2					POOR
COOL SEASON GRASSES										
CREEPING FOXTAIL	7		6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	7		7	7	1-2					POOR
ORCHARDGRASS	6		6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	6		7	7	1-2					POOR
REED CANARYGRASS	7		7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
DOREED	7		8	6	1-2					POOR
RISE	7		8	6	1-2					POOR
TALL FESCUE	5		6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	5		7	4						POOR
WHEATGRASS										
TALL	8		5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	8		6	4	1-2					FAIR
WESTERN	8		4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	8		5	5	1-3					GOOD

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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: Dillwyn complex
Kanza loamy fine sand
Kingman silty clay loam
Platte soils
Plevna fine sandy loam, complex
Wet alluvial land

Recommended Species: See chart on next page.

LAB: 80A
SUSTAINABILITY GROUP: C-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
	DAYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	8	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	8	-	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	7	-	6	7	1-3					FAIR
OSAGE	7	-	6	7	1-3					FAIR
COOL SEASON GRASSES										
CREEPING FOXTAIL	5	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	5	-	7	7	1-2					POOR
ORCHARDGRASS	6	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	6	-	7	7	1-2					POOR
REED CANARYGRASS	5	-	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
TOREED	5	-	8	6	1-2					POOR
RISE	5	-	8	6	1-2					POOR
TALL FESCUE	6	-	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	6	-	7	4						POOR
WHEATGRASS										
TALL	8		5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	8		6	4	1-2					FAIR
WESTERN	8		4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	8		5	5	1-3					GOOD

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