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, loamy
- Brewer silty clay loam
- Bridgeport silt loam
- Detroit silty clay loam, silt loam
- Eudora loam, silt loam, very fine sandy loam
- Hobbs silt loam, complex
- Hord silt loam
- Humbarger loam, clay loam
- Kaski loam
- McCook silt loam, fine sandy loam
- Muir loam, silt loam, silty clay loam
- New Cambria silty clay, silty clay loam
- Reading silt loam
- Tobin silt loam
- Sutphen silty clay loam, silty clay, clay

Recommended Species: See chart on next page.

0

LRA: 74 & 75
SUITABILITY GROUP: A-1

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	SPECIES ADAPTABILITY 1_/ IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	FERTILIZER NEEDS 5_/ P	FERTILIZER NEEDS 5_/ K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	6S	8S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6S	8S	9	4	2-3					FAIR
MIDLAND	6S	8S	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
PAWNEE	7N	7N	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8	9	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
NEBRASKA 54	7N	7N	6	7	1-3					FAIR
OSAGE	7S	8S	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
PATHFINDER	8N	8N	6	5	1-2					GOOD
TRAILBLAZER	8N	8N	6	6	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	3N	5N	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	3N	5N	7	7	1-2					POOR
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	3	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	3	6	8	6	1-2					POOR
RISE	2	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	7	8	6	7		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	6	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	6	8	7	4	1					POOR
WHEATGRASS										
TALL	7	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	7	7	6	4	1-2					FAIR
WESTERN	8	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	8	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:
- Englund loam
- Farnum loam, fine sandy loam, complex
- Geary clay loam, silt loam, silty clay loam, complex
- Harney silt loam, silty clay loam
- Hastings silt loam, silty clay loam, fine sandy loam complex
- Holder silt loam
- Kenesaw silt loam
- Longford silt loam, silty clay loam
- Norge silt loam, silty clay loam
- Nuckolls silt loam
- Shellabarger silt loam, sandy loam
- Smolan silty clay loam, complex
- Tully silt loam, silty clay loam
- Vanoss silt loam
- Wells loam, clay loam, sandy loam

Recommended Species: See chart on next page.

0

LRA: 74 & 75
SUITABILITY GROUP: A-2

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	SPECIES ADAPTABILITY 1_/ IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	FERTILIZER NEEDS 5_/ P	FERTILIZER NEEDS 5_/ K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	4S	7S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	4S	7S	9	4	2-3					FAIR
MIDLAND	4S	7S	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
PAWNEE	6N	7N	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
NEBRASKA 54	6N	7N	6	7	1-3					FAIR
OSAGE	7S	8S	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
PATHFINDER	7N	8N	6	5	1-2					GOOD
TRAILBLAZER	7N	8N	6	6	1-2					GOOD
COOL SEASON GRASSES										
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	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	4	7	7	7	1					FAIR
SOUTHLAND	4	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
WHEATGRASS										
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
(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 fine sandy loam
Carr fine sandy loam
Cass fine sandy loam, loam
Haynie complex
Humbarger loamy fine sand

Recommended Species: See chart on next page.

0

LRA: 74 & 75
SUITABILITY GROUP: A-3

SPECIES	SPECIES ADAPTABILITY 1 / DRYLAND	IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	P	K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	6S	8S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6S	8S	9	4	2-3					FAIR
MIDLAND	8S	8S	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
PAWNEE	7N	7N	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8	9	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
NEBRASKA 54	7N	7N	6	7	1-3					FAIR
OSAGE	7S	8S	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
GARDEN	7N	8N	5	7	1-3					FAIR-GOOD
WOODWARD	7S	8S	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
PATHFINDER	8N	8N	6	5	1-2					GOOD
TRAILBLAZER	8N	8N	6	6	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	3	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	3	5	7	7	1-2					POOR
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	3	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	3	6	8	6	1-2					POOR
RISE	2	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	6	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	6	8	7	4	1					POOR
WHEATGRASS										
TALL	7	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	7	7	6	4	1-2					FAIR
WESTERN	8	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	8	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	7	9	10	8		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:
- Derby loamy sand
- Els loamy sand
- Pratt loamy sand, loamy fine sand, complex
- Sarpy loamy sand, soils (only duned phases)
- Tivoli fine sand, complex 1/
- Valentine loamy fine sand 1/
- Sand dunes, sarpy material

1/ Suitable only when irrigated

Recommended Species: See chart on next page.

LRA: 74 & 75
SUITABILITY GROUP: A-4

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	SPECIES ADAPTABILITY 1_/ IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	FERTILIZER NEEDS 5_/ P	FERTILIZER NEEDS 5_/ K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	5S	7S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	5S	7S	9	4	2-3					FAIR
MIDLAND	5S	7S	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
PAWNEE	6N	7N	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
NEBRASKA 54	6N	7N	6	7	1-3					FAIR
OSAGE	6S	7S	6	7	1-3					FAIR
PRAIRIE SANDREED	7	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	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
GARDEN	8N	8N	5	7	1-3					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
PATHFINDER	7N	7N	6	5	1-2					GOOD
TRAILBLAZER	7N	7N	6	6	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
✓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	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3	7	7	4	1					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: Attica loamy fine sand
Naron fine sandy loam
Ortello fine sandy loam

Recommended Species: See chart on next page.

LRA: 74 & 75
SUITABILITY GROUP: A-6

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	SPECIES ADAPTABILITY 1_/ IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	FERTILIZER NEEDS 5_/ P	FERTILIZER NEEDS 5_/ K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	4S	7S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	4S	7S	9	4	2-3					FAIR
MIDLAND	4S	7S	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
PAWNEE	6N	7N	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
NEBRASKA 54	6N	7N	6	7	1-3					FAIR
OSAGE	7S	8S	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
GARDEN	7N	8N	5	7	1-3					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
PATHFINDER	7N	8N	6	5	1-2					GOOD
TRAILBLAZER	7N	8N	6	6	1-2					GOOD
COOL SEASON GRASSES										
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH 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	1					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										
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
(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-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: Clark clay loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 / DRYLAND	SPECIES ADAPTABILITY 1 / IRRIGATED	SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 / N	FERTILIZER NEEDS 5 / P	FERTILIZER NEEDS 5 / K	Ph RANGE 6 /	DROUGHT TOLERANCE
WARM SEASON GRASSES										
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
PAWNEE	6N	7N	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
NEBRASKA 54	6N	7N	6	7	1-3					FAIR
OSAGE	5	6	6	7	1-3					FAIR
SIDEOATS 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
TRAILWAY	8N	7N	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
PATHFINDER	6N	7N	6	5	1-2					GOOD
TRAILBLAZER	6N	7N	6	6	1-2					GOOD
COOL SEASON GRASSES										
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	1					FAIR
TALL FESCUE	2	5	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	2	5	7	4	1					POOR
WHEATGRASS										
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.

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: Sarpy loamy sand, loamy fine sand

Recommended Species: See chart on next page

SPECIES	SPECIES ADAPTABILITY 1 / DRYLAND	SPECIES ADAPTABILITY 1 / IRRIGATED	SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 / N	FERTILIZER NEEDS 5 / P	FERTILIZER NEEDS 5 / K	Ph RANGE 6 /	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	5S	7S	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	5S	7S	9	4	2-3					FAIR
MIDLAND	5S	7S	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
PAWNEE	6N	7N	6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	5S	8S	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
NEBRASKA 54	6N	7N	6	7	1-3					FAIR
OSAGE	5	6	6	7	1-3					FAIR
PRAIRIE SANDREED	7	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	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
GARDEN	8N	8N	5	7	1-3					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
PATHFINDER	7N	7N	6	5	1-2					GOOD
TRAILBLAZER	7N	7N	6	6	1-2					GOOD
COOL 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	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3	7	7	4	1					POOR
WHEATGRASS										
WESTERN	6	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	1	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 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: Chase silty clay loam
Gibbon loam
Lesho loam, clay loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	P	K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	6S		9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	6S		9	4	2-3					FAIR
MIDLAND	6S		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
PAWNEE	5N		6	7	2-3					FAIR-GOOD
EASTERN GAMAGRASS	8S		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
NEBRASKA 54	5N		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
KANLOW	6		8	4	1-2					POOR
PATHFINDER	6N		6	5	1-2					GOOD
TRAILBLAZER	6N		6	6	1-2					GOOD
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
IOREED	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	1					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

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: Solomon silty clay
Sutphen clay, silty clay, silty clay loam

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1_/ DRYLAND	IRRIGATED	SPECIES PRODUCTIVITY 2_/	GRAZING PREFERENCE 3_/	STAND ESTABLISHMENT 4_/	FERTILIZER NEEDS 5_/ N	P	K	Ph RANGE 6_/	DROUGHT TOLERANCE
WARM SEASON GRASSES										
BERMUDAGRASS	5S	-	9	5	2-3	1-3	0-2	1-2	5.5-8.0	FAIR
HARDIE	5S	-	9	4	2-3					FAIR
MIDLAND	5S	-	9	5	2-3					FAIR
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
PAWNEE	4N	-	6	7	2-3					FAIR-GOOD
SWITCHGRASS	6	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	-	6	5	1-2					GOOD
KANLOW	5	-	8	4	1-2					POOR
PATHFINDER	5N	-	6	5	1-2					GOOD
TRAILBLAZER	5N	-	6	6	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	6	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	6	-	7	7	1-2					POOR
ORCHARDGRASS	5	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	5	-	7	7	1-2					POOR
REED CANARYGRASS	6	-	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IDREED	6	-	8	6	1-2					POOR
RISE	6	-	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	1					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

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.