GRASSLAND CONDITION

STUDENT I.D. NO. ______________________ STUDENT NAME ______________________ SCORE: _______ Points: 100

APPRAISAL OF EXISTING CONDITIONS
(5 points each)

What is the pasture type?
A. Fescue (>90% fescue)
B. Cool-season grasses (<10% legume or other grasses)
C. Cool-season grasses (10-25% legume)
D. Cool-season Grasses (26-60% legume)
E. Legumes dominant (>75% legume)
F. Warm-season grasses (< 25% other species)

2. What is the average growth stage of the dominant forage species?
A. Vegetative
B. Boot or bud
C. Heading or bloom

3. What best describes the condition of the pasture sward?
A. Spat grazed
B. Evenly grazed

4. Is weed or brush control needed other than by grazing or soil fertility management?
A. Yes
B. No

5. What soil pH range is recommended for this sward?
A. 4.5 - 5.0
B. 5.1 - 5.5
C. 5.6 - 6.0
D. 6.1 - 6.5
E. 6.6 - 7.0
F. 7.1 - 7.5

6. What fertilizer option is recommended for this pasture?

7. What limestone rate is recommended for this pasture in tons per acre?

MATCHING LIVESTOCK AND FORAGE
(5 points for each answer space)

When does this livestock herd have the highest forage quality requirement?
A. Spring
B. Summer
C. Fall
D. Winter
E. Requirement high year round

2. Does this pasture's growth cycle match the seasonal peak nutritional needs of this livestock herd under present management?
A. Yes
B. No

3. How many pounds of forage dry matter does this herd need to consume per day in:
   ___ lbs. in spring (5 pts.)
   ___ lbs. in summer (5 pts.)
   ___ lbs. in fall (5 pts.)

4. Is forage availability adequate for this herd in:
   Spring - 100 days (5 pts.)
   Summer - 100 days (5 pts.)
   Fall - 100 days (5 pts.)

Adequate
Not adequate

SEE REVERSE SIDE

Revised: February, 1999
PASTURE IMPROVEMENT
(Answers to questions 3, 4, and 5 for this section are based on the choice for question Number 2)
(5 points each)

1. What change should be made in livestock management?
   A. Continue present management
   B. Reduce livestock numbers
   C. Change calving season to a different time of year
   D. Shorten calving season a period of <90 days
   E. Provide higher quality pasture for heifers and steers
   F. Switch to a management-intensive rotational grazing system

2. What type of additional forage is needed to improve this forage program?
   A. Cool season grass
   B. Warm season grass
   C. Legumes
   D. No additional forages needed - use existing pasture

3. How should this forage be planted?
   A. Plant on clean, firm seedbed
   B. No-till plant in a killed sod
   C. Overseed or interseed in a closely grazed sod
   D. No additional forages needed - use existing pasture

4. What fertilizer option is recommended for this forage?

5. What limestone rate is recommended for this forage in tons per acre?

Grassland Evaluation: Revised: February, 1999
### Soil Interpretation

**Soil Evaluation**

(5 points each)

<table>
<thead>
<tr>
<th>Surface Texture</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Sand</td>
<td>D. Clay loam or silty clay loam</td>
</tr>
<tr>
<td>B. Sandy loam</td>
<td>E. Clay or silty clay</td>
</tr>
<tr>
<td>C. Loam or silt loam</td>
<td></td>
</tr>
</tbody>
</table>

2. Chert and gravel content of surface layer (The A Horizons)

A. <15% (no coarse fragment modifier such as sand, silt or clay
B. 15 - <35% cherty or gravely
C. 35 - <60% very cherty or gravely
D. >60% extremely cherty or extremely gravelly

3. Slope (between 50’ stakes in field)

A. 0 - <2% nearly level
B. 2 - <5% gently sloping
C. 5 - <9% sloping
D. 9 - <14% very sloping
E. 14 - <25% steep
F. >25% very steep

4. Depth of soil (or zone) limiting rooting depth

A. 40 - 60+ in. deep or very deep
B. 20 - 40 in.
C. 10 - <20 in. shallow
D. 0 - <10 in. very shallow

5. Drainage class

A. Very poorly drained
B. Poorly drained
C. Somewhat poorly drained
D. Moderately well drained
E. Well drained
F. Somewhat excessively drained
G. Excessively drained

6. Depth of surface layer (The A Horizons)

A. <3 inches
B. 3 - <7 inches
C. 7 - 10 inches
D. >10+ inches

7. Permeability of most limiting layer or to 60 inches

<table>
<thead>
<tr>
<th>Inches/HR</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. &lt;0.06 very slow</td>
<td></td>
</tr>
<tr>
<td>B. 0.06 - &lt;0.2 slow</td>
<td></td>
</tr>
<tr>
<td>C. 0.20 - &lt;0.6 moderately slow</td>
<td></td>
</tr>
<tr>
<td>D. 0.60 - &lt;2.0 moderate</td>
<td></td>
</tr>
<tr>
<td>E. 2.00 - &lt;6.0 moderately rapid</td>
<td></td>
</tr>
<tr>
<td>F. 6.00 - &lt;20.0 rapid</td>
<td></td>
</tr>
<tr>
<td>G. &gt;20.0 very rapid</td>
<td></td>
</tr>
</tbody>
</table>

8. Available water capacity to most limiting layer (fragipan or bedrock) or to 60 inches.

A. 0 - <3 very slow
B. 3 - <6 low
C. 6 - <9 moderate
D. 9 - <12 high
E. 12+ very high

9. Land capability class

A. Class I
B. Class II
C. Class III
D. Class IV
E. Class V
F. Class VI
G. Class VII
H. Class VIII

10. Major factors, if any, that keep acre out of Class I

A. S = stoniness, shallowness, droughtiness
B. W = wetness, and/or flooding
C. E = erosion
D. None

### Forage Adaptation

(5 points each)

(check one space per answer)

<table>
<thead>
<tr>
<th>Forage</th>
<th>Adapted</th>
<th>Not Adapted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Timothy</td>
<td></td>
<td></td>
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<tr>
<td>2. Indiangrass</td>
<td></td>
<td></td>
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<tr>
<td>3. Bermuda Grass</td>
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<tr>
<td>4. Red Clover</td>
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<tr>
<td>5. Bromegrass</td>
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<td></td>
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<tr>
<td>6. Big Bluestem</td>
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<tr>
<td>7. Reed Canary Grass</td>
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<td></td>
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<tr>
<td>8. Birdsfoot Trefoil</td>
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<td></td>
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<tr>
<td>9. Caucasian Bluestem</td>
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<tr>
<td>10. Alfalfa</td>
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</tr>
</tbody>
</table>

Revised: February, 1999
## Grassland Evaluation Contest

### Plant Identification List

<table>
<thead>
<tr>
<th>Student I.D. No.</th>
<th>Student Name</th>
<th>Score</th>
<th>Points: 100</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

(Write the number of each plant in the space before its name and under its proper life cycle designation; NOTE: Ann = Annual, Bie/Per = Biennial or Perennial)

#### ***Grasses & Grass-like***
- Barnyard Grass
- Bermuda Grass
- Bluegrass (Kentucky)
- Blue Grass, Big
- Blue Grass (Old World)
- Blue Grass, Little
- Bromegrass, Smooth
- Broom杉edge (Broomstraw)
- Crab Grass
- Downy Chess (Downy Brome, Cheat Grass)
- Fescue (Tall)
- Foxtail (Giant, Green & Yellow)
- Indian Grass
- Johnson Grass
- Orchard Grass
- Purple Top
- Reed Canary Grass
- Quack Grass
- Sedges
- Switch Grass
- Three-awn Grass (Poverty, Needle Grass)
- Timothy

#### ***Legumes***
- Alfalfa
- Birdsfoot Trefoil
- Cats Claw Sensitive Briar
- Clover, White
- Clover, Red
- Clover, Sweet
- Clover (Little Hop)
- Goats Rue
- Illinois Bundleflower
- Lead Plant
- Lespedeza (Korean, Common)
- Lespedeza, Sericea
- Lespedeza, Slender
- Partridge Pea
- Tick Trefoil (Beggars Tick)

#### ***Forbs***
- Bull Nettle (Horse)
- Chicory, Common
- Cinquefoil
- Cocklebur, Common
- Croton
- Daisy Fleabane
- Dandelion
- Goldthread (Prairies)
- Ironweed
- Lamb's Quarters
- Milkweed, Common
- Nightshade, Black
- Pigweed
- Plantain
- Queen Anne's Lace
- Ragweed (Common, Giant, Lanecleaf)
- Smartweed
- Thistle (Tall, Musk, Bull)
- Three-seeded Mercury
- Velvetleaf
- Yarrow, Common

#### ***Woody Plants***
- Blackberry
- Black Cherry
- Coralberry (Buckbrush)
- Dewberry
- Elm
- Grape
- Hawthorn
- Hickory
- Locust (Black or Honey)
- Oak, Black or White
- Osage Orange (Hedge Apple, Hedge)
- Persimmon
- Poison Ivy
- Red Cedar (Juniper)
- Rose (Multiflora or Wild)
- Sassafras
- Sumac
- Wild Plum

Revised: June, 2000