Agricultural Science II

Curriculum Guide: *Introduction to Grassland Management*

Unit: I. Grasslands and Grassland Plants

Unit Objective:

Students will demonstrate the ability to identify and analyze a grassland area by collecting and identifying plant samples from the area and assembling their samples in a binder or other format.

Show-Me Standards: 1.3, SC5

References:

Grassland Evaluation Contest Study Guide. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Introduction to Grassland Management. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 4.
- Students will complete AS 1.1, Word Search; AS 2.1, Constructing a Plant Press; AS 2.2, Identifying Grassland Plants; and AS 4.1, Grassland Composition Survey.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: pp. I-5–I-6 (1, 4), p. I-20, and p. I-44 (1, 2).

Performance-Based Assessment:

Students will work in groups to identify and analyze a native or managed grassland. Each group must locate a grassland area, determine what kind it is, and identify in detail samples of the plants they find. Students will assemble their samples and findings in a binder, photo album, or other format, such as a computer presentation.

Assessment will be based on the thoroughness of the samples, the accuracy of the identifications, and the overall presentation of the project. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the other members of their group.

Agricultural Science II		

Introduction to Grassland Management Unit I—Grasslands and Grassland Plants Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

- 1. Divide the class into groups.
- 2. Have each group locate a grassland area and determine what type of grassland it is, such as a glade, savanna, lawn, or pasture.
- 3. Have students establish an area, 50 ft x 50 ft, and study it in detail.
 - a. The study area is set at 50 ft x 50 ft to mirror the judging site size used in Grassland Evaluation Contests. For more information about Grassland Evaluation, consult the *Grassland Evaluation Contest Study Guide*, available from the University of Missouri-Columbia, Instructional Materials Laboratory.
 - b. Students must collect at least 10 different plants from the area, which they will identify and classify by filling out an identification sheet for each plant.
 - c. Provide students with blank identification sheets, such as the one found in AS 2.2 on p. I-37 of the Instructor Guide, or explain the format identification sheets should follow.
- 4. Depending on the time constraints of the project, have students examine their sample grassland at one particular point in time or return to the area over the course of the unit and record any developments and changes.
- 5. Have students assemble their samples and findings in a binder, photo album, or other format, such as a computer presentation, and label the collection according to the type of grassland studied and its location.
- 6. Students may incorporate other elements, such as photos, to make the report interesting and informative.
- 7. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in helping to complete the project. A peer evaluation form is included following the scoring guide.

Agricultural Science II

- a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
- b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
- c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
- 8. The final assessment score will be a combination of the student's project score and final peer evaluation score.

Introduction to Grassland Management Unit I—Grasslands and Grassland Plants Student Handout

- 1. The instructor will divide the class into groups.
- 2. Your group must locate a grassland area and determine what type of grassland it is, such as a glade, savanna, lawn, or pasture.
- 3. You will then establish an area, 50 ft x 50 ft, and study it in detail.
- 4. Collect at least 10 different plants from the area. Identify and classify the plants by filling out an identification sheet for each one. The instructor will provide identification sheets or explain what information each sheet must include.
- 5. Assemble your samples and findings in a binder, photo album, or other format, such as a computer presentation, and label the collection according to the type of grassland studied and its location.
- 6. Use other elements, such as photos, as needed to make the report interesting and informative.
- 7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance.
 - a. When the project is complete, fill out the peer evaluation score sheet.
 - b. Give the completed score sheet to your instructor.
- 8. Your final assessment will be a combination of your completed project score and final peer evaluation score.

Agricultural Science II		

Page 7

Agricultural Science II

Introduction to Grassland Management Unit I—Grasslands and Grassland Plants Scoring Guide

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and	□ Information is	0 criteria	1-2 criteria	3 criteria	4 criteria	All 5	X 18	
Content	complete	met	met	met	met	criteria		
	□ Facts are accurate					met		
	☐ Includes at least 10							
	different plant							
	samples							
	□ Grassland and							
	samples are							
	correctly identified							
	□ Provides a thorough							
	survey of a							
D	grassland area	0 :: :	1	2	2 :. :	A 11 4	V = =	
Presentation	□ Clear and well	0 criteria	1 criterion	2 criteria	3 criteria	All 4	X 5.5	
	organized	met	met	met	met	criteria		
	□ Emphasizes key					met		
	points □ No spelling,							
	grammar, or							
	punctuation errors							
	Good use of							
	supporting materials							
Peer Evaluation						6 pts. max	imum	
TOTAL								

Final Assessment	Total	/100	pts
-------------------------	-------	------	-----

Comments:

Introduction to Grassland Management	
Unit I—Grasslands and Grassland Plants	3
Peer Evaluation	

Name			

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 no contribution
- 1 minimal contribution
- 2—average contribution
- 3 excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as collecting samples and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)

Agricultural Science II		