

NRM 4307/5303 Range and Wildlife Habitat Management  
Fall 2015

**Instructor:**

Mr. Chris Pipes, M.S.

Office: RAS 116

Cell Phone (call or text): 432-413-1554

E-mail: cpipes@sulross.edu

Office Hours: Monday/Wednesday, 2:00 - 4:00 p.m., or by appointment

**Course description:**

Principles and practices of range and wildlife habitat management, including range improvement through mechanical, chemical, prescribed burning, and biological manipulation of vegetation, grazing systems, revegetation, and other habitat management practices. Also incorporates the effects of these practices on livestock and wildlife interactions.

**Class meetings:**

Lecture/lab: M/W 10:00 - 11:50 (or longer for some field trips), RAS 128

For field trips, dress appropriately for walking around in the sun and amongst the bugs, thorns, brush, etc.

**TENTATIVE Course Outline:**

<b>DATE</b>	<b>Monday</b>	<b>Wednesday</b>
Aug 24/26	Introduction, syllabus, etc.	Principles & Concepts
Aug 31/Sep 2	Principles & Concepts ( <b>Species selection due</b> )	Types of Rangeland
Sep 7/9	<b>LABOR DAY. NO CLASSES</b>	Brush
Sep 14/16	<b>Field Trip (Mimms Ranch)</b>	Controlled Grazing ( <b>Field Trip Paper due</b> )
Sep 21/23	Controlled Grazing ( <b>Field Trip Paper due</b> )	Prescribed Burning
Sep 28/30	Prescribed Burning	Chemical Treatments ( <b>Species Paper due</b> )
Oct 5/7	Chemical Treatments	<b>Field Trip (O2 Ranch)</b>
Oct 12/14	Chemical Treatments	Review (Habitat Assessment ( <b>Field Trip Paper due</b> ))
Oct 19/21	<b>Mid-term Exam</b>	Mechanical Treatments
Oct 26/28	Mechanical Treatments	Fertilizing/Seeding ( <b>Habitat Assessment Paper due</b> )
Nov 2/4	Water	<b>Field Trip (EMWMA)</b>
Nov 9/11	Fences/Other Improvements	Case Study: Riparian Areas ( <b>Field Trip Paper due</b> )
Nov 16/18	Case Study: Riparian Areas	Case Study: Riparian Areas
Nov 23/25	<b>Field Trip (Davis Mountains Preserve)</b>	<b>TG HOLIDAYS. NO CLASSES.</b>
Nov 30/Dec 2	Small Properties ( <b>Field Trip Paper due</b> )	Final Review ( <b>Habitat Management Paper due</b> )
<b>FINAL</b>	<b>Monday, Dec. 7, 10:15 a.m.</b>	

**Objectives:**

1. Students will be able to state the principles and concepts that drive habitat management.
2. Students will be able to explain how to apply different land management techniques to achieve a desired habitat result.
3. Students will develop a specific plan for habitat management through a series of assignments.

**Recommended Text:** Wildlife Habitat Management of Forestlands, Rangelands, and Farmlands, Neil F. Payne and Fred C. Bryant, 1998.

**Policies:**

1. Roll will be taken during each class meeting. The SRSU catalog states "The instructor may, at his discretion, drop a student from a course when the student has a total of nine absences. An absence is defined as non-attendance in fifty minutes of class. Non-attendance in a one and one-half hour class will constitute one and one-half absences." (In other words, I can drop you from the course if you miss 4 ½ classes.)
2. Cheating on any exam or assignment will result in an F for that material and possible expulsion from the class with a grade of F.
- 3.. Missed exam/quiz policy: No make-ups will be provided for unexcused absences and a grade of 0 will be assigned. Request for an excused absence must be made at least 12 hours prior to exam/quiz time. Make-up exams/quizzes should be taken in advance of the normal date/time, or, in extreme circumstances, afterward within one week of the original date/time.
4. If you miss a lecture, obtain notes from a willing classmate. Handouts, assignments, etc. may be obtained from me. The PowerPoint material, handouts, etc. will be posted on Blackboard, but this does NOT constitute all of the material for which you are responsible. In class, I may expound on the material on the screen, write on the board, etc. This additional material is fair game for testing. Thus, attendance is very important.
5. It is Sul Ross State University Policy to provide reasonable accommodation to students with disabilities. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator.

**TENTATIVE Grade Structure:**

Species Paper	15%
Habitat Assessment Paper	10%
Habitat Management Paper	15%
Mid-term Exam	20%
Final Exam	20%
Lab activities, other assignments, quizzes, etc. (mostly in class)	10%
Field trips, 2 at 5% each	10%

**\*\*\* Must attend at least two field trips and turn in a short paper for each to be eligible for more than a “D” in the class. Extra credit will be awarded for attendance with short paper on additional field trips, up to 5 points per trip added to final grade. \*\*\***

Grade assignment: <60 = F; 60-69 = D; 70-79 = C; 80-89 = B; 90-100 = A

**CHECK BLACKBOARD AND YOUR SUL ROSS E-MAIL FREQUENTLY.**

**Program Learning Outcomes for the B.S. in Natural Resource Management:**

The graduating student will demonstrate that he/she is able to:

1. Identify species of wildland plants and wildlife common to the western United States and describe their natural history.
2. Demonstrate knowledge of the elements of an ecosystem.
3. Communicate about natural resources and conservation both verbally and in writing.
4. Conduct range and wildlife inventories in a team setting.
5. Apply knowledge about elements of an ecosystem into an appropriate conservation management plan.

Species Paper  
Due September 30

For this assignment, research and write a paper (typed, double spaced, 12 pt font, 1” margins) on the species assigned to you in class. The paper should include information from peer reviewed journals, books, and reliable websites such as USFWS, the Audubon Society, TPWD, etc. If you use websites, those ending in .com are not acceptable. Websites ending in .gov or .edu are best. Websites ending in .org (nonprofit organizations, but NOT Wikipedia) are ok as long as it’s something reputable. Cite all sources. Should be at least 3-5 pages with about 5 sources. Include a BRI publication resource if possible ([http://bri.sulross.edu/pubs\\_reports.html](http://bri.sulross.edu/pubs_reports.html)).

For your species you will need to include:

Physical description of the species;

Primary habitat;

Wintering habitat (if none in particular, say so);

Breeding habitat (if none in particular, say so);

Cover type required for the aforementioned habitats (types of vegetation, how much of each, etc.);

Any special habitat needs (minimum amount of space, specific nest-building material, etc.);

Foraging strategies;

Food sources;

Daily water requirements (how much) and type (free, preformed, or metabolic);

Breeding strategies and behaviors;

Conservation status with USFWS, TPWD, and IUCN Red List (websites provided on Blackboard);

Population status (how many total do we think there are and where are they);

Any other information that is pertinent to designing a habitat management plan for the species.

